AERB Safety Code on SAFE TRANSPORT OF RADIOACTIVE MATERIAL, AERB/NRF-TS/SC-1 (Rev.1), 2016 is in the process of incorporating ageing mechanism aspects in design approval of package and special form radioactive material in order to align with International Atomic Energy Agency (IAEA): Regulations for the Safe Transport of Radioactive Material 2018 Edition, SSR-6 (Rev.1), 2018, ensuring consistency and facilitating international cooperation and compliance.

The attached addendum highlights the revised sections of the Code to align with IAEA SSR-6 Rev.1, 2018 w.r.t. ageing mechanisms and special form radioactive material only. These revised requirements should be read in conjunction with the current AERB/NRF-TS/SC-1 (Rev.1), 2016, which is available in the AERB website: https://www.aerb.gov.in/english/publications/codes-guides

In view of this, the attached annexure is being posted for public comments within 15 days.

Addendum to AERB Safety Code on SAFE TRANSPORT OF RADIOACTIVE MATERIAL, AERB/NRF-TS/SC-1 (Rev.1), 2016

	Section	Additional Clause(s)
1.	1.3 Scope	Application of the Provisions of the Safety Code
	Section 1.3.1	For the purpose of this safety code the term, transport shall be deemed to comprise all operations and conditions associated with, and involved in, the movement of radioactive material; these include the design, manufacture, maintenance and repair of packaging; and the preparation, consigning, loading, carriage including in-transit storage, unloading and receipt at the final destination of radioactive material and packages
	Revised section 1.3.1	For the purpose of this safety code the term, transport shall be deemed to comprise all operations and conditions associated with, and involved in, the movement of radioactive material; these include 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 radioactive material and packages
	BASIS:	
	New Requirement	
	(Para 106 of IAEA SSR 6 Rev.1, 2018)	
2.	Section 5.3 New Section 5.3.7.A	General Requirements for All Packagings and Packages
		The design of the package shall take into account

	BASIS:	ageing mechanisms.
	New Requirement	
	(Para 613A of IAEA SSR 6, Rev.1, 2018)	
3.	Section 6.2 New Section 6.2 (iv)	For packages intended to be used for shipment after storage, it shall be ensured that all packaging components and radioactive contents have been maintained during storage in a manner such that all the requirements specified in the relevant provisions of these Regulations and in the applicable certificates of approval have been fulfilled.
	BASIS:	
	New Requirement	
	503(e) of IAEA SSR 6, Rev.1, 2018	
4.	Section 7.4.2.2	7.4.2.2 An application for approval shall include:
	New Section 7.4.2.2 (j)	7.4.2.2 (j) If the <i>package</i> is to be used for <i>shipmen</i> after storage, a justification of considerations to ageing mechanisms in the safety analysis an within the proposed operating and maintenance instructions.
	BASIS:	instructions.
	New Requirement	
	(Para 809 (f) of IAEA SSR 6, Rev.1,2018)	
5.	Section 7.4.2.2 New Requirement 7.4.2.2 (k)	7.4.2.2 (k) For <i>packages</i> which are to be used for <i>shipment</i> after storage, a gap analysis programm describing a systematic procedure for a period evaluation of changes of regulations, changes technical knowledge and changes of the state the <i>package design</i> during storage.
	BASIS:	
	New Requirement	
	(Para 809 (k) of IAEA SSR 6, Rev.1,2018)	

6.	Section 7.6.1 Existing Requirement	Packages not requiring Competent Authority Approval of Design under the 1985 and 1985 (Amended 1990) Editions of the IAEA Regulatio for the Safe Transport of Radioactive Material
	Revised Requirement	Packages not requiring competent authorized approval of design under the 1985, 1985 (Amended 1990), 1996 Edition, 1996 Edition (Revised), 1996 (As Amended 2003), 2005, 200 and 2012 Editions of the IAEA Regulations for the Safe Transport of Radioactive Material
	BASIS:	
	Revised Requirement	
	(TRANSITIONAL ARRANGEMENT of IAEA SSR 6, Rev.1,2018)	
	New Section 7.6.1.3	7.6.1.3 Packages that meet the requirements of the 1996 Edition, 1996 Edition (Revised), 1996 (Amended 2003), 2005, 2009 or 2012 Editions of the IAEA Regulations for the Safe Transport Radioactive Material:
		(a) May continue in transport provided that the were prepared for transport prior to 31 Decemb 2025 and are subject to the requirements of par 7.6.3, if applicable; or
		(b) May continue to be used, provided that all the following conditions are met:
		(i) The applicable requirements of para. 2.3.1 this safety code are applied;
		(ii) The activity limits and classification specified

		this safety code are applied.
		(iii) The requirements and controls for transport specified in this safety code are applied
		(iv) The packaging was not manufactured or
	E-CONTRACTOR CONTRACTOR CONTRACTO	modified after 31 December 2025.
	BASIS:	
	New Requirement	
	Transitional Arrangements	
	(Para 819 (b) of IAEA SSR 6, Rev.1,2018)	
7.	Section 7.6.2	
	Existing Requirement	Packages approved under the 1973, 1973 (As
		Amended), 1985 and 1985 (As Amended 1990)
		Editions of the IAEA Regulations for the Safe
		Transport of Radioactive Material
		Package designs approved under the 1985, 1985
	Revised Requirement	(As Amended 1990), 1996 Edition, 1996 Edition
		(Revised), 1996 (As Amended 2003), 2005, 2009
		and 2012 Editions of the IAEA Regulations for the
		Safe Transport of Radioactive Material
	BASIS:	
	Revised Requirement	
	(TRANSITIONAL ARRANGEMENT of IAEA SSR 6, Rev.1,2018)	
	New Requirement	7.6.2.1A Packagings that were manufactured to a package design approved by the competen authority under the provisions of the 1996 Edition 1996 Edition (Revised), 1996 (As Amended 2003) 2005, 2009 and 2012 Editions of the IAEA

		Regulations for the Safe Transport of Radioactive Material may continue to be used provided that all of the following conditions are met:
		(i) The package design is subject to multilateral approval after 31 December 2025.
		(ii) The applicable requirements of para. 2.3.1 of this safety code are applied;
		(iii) The activity limits and classification specified in this safety code are applied.
		(iv) The requirements and controls for transport specified in this safety code are applied
	BASIS:	
	New Requirement	
	Introduction of para 820 (b) of IAEA SSR 6, Rev.1,2018	
8.	New Section 7.6.2.3	No new manufacture of <i>packagings</i> of a <i>package design</i> meeting the provisions of the 1996 Edition, 1996 Edition (Revised), 1996 (As Amended 2003), 2005, 2009 and 2012 Editions of the IAEA Regulations for the Safe Transport of Radioactive Material shall be permitted to commence after 31 December 2028.
-	BASIS:	
	New Requirement	
	(Para 821 A of IAEA SSR 6, Rev.1, 2018)	
9.	7.6.4	Special form Radioactive Material Approved under
		the 1973, 1973(As Amended), 1985 and 1985 (As
	Existing Requirement	Amended 1990) Editions of the IAEA Regulations for the Safe Transport of Radioactive Material
		Special form radioactive material manufactured to a design that had received unilateral approval by the Competent Authority under the 1973, 1973 (As Amended), 1985 or 1985 (As Amended 1990)

Revised Requirement

Editions of the IAEA regulations for the Safe Transport of Radioactive Material may continue to be used when in compliance with the mandatory management system in accordance with the applicable requirements of clause 2.3.1. No new manufacture of such special form radioactive material shall be commenced.

Special form radioactive material approved under the 1985, 1985 (As Amended 1990), 1996 Edition, 1996 Edition (Revised), 1996 (As Amended 2003), 2005, 2009 and 2012 Editions of these Regulations.

Special form radioactive material manufactured to a design that had received unilateral approval by the competent authority under the 1985, 1985 (As Amended 1990), 1996 Edition, 1996 Edition (Revised), 1996 (As Amended 2003), 2005, 2009 and 2012 Editions of the IAEA Regulations for the Safe Transport of Radioactive Material may continue to be used when in compliance with the mandatory management system in accordance with the applicable requirements of clause 2.3.1. There shall be no new manufacture of special form radioactive material to a design that had received unilateral approval by the competent authority under the 1985 or 1985 (As Amended 1990) Editions of the IAEA Regulations for the Safe Transport of Radioactive Material. No new manufacture of special form radioactive material to a design that had received unilateral approval by the competent authority under the 1996 Edition, 1996 Edition (Revised), 1996 (As Amended 2003), 2005, 2009 and 2012 Editions of the IAEA Regulations for the Safe Transport of Radioactive Material shall be permitted to commence after 31 December 2025.

BASIS:

Revised Requirement

(Para 823 of IAEA SSR 6,

	Rev.1,2018)	