

CERTIFICATE OF APPROVAL FOR SPECIAL FORM RADIOACTIVE MATERIAL

This is to certify that for the purposes of the Regulations of the International Atomic Energy Agency

- The Competent Authority of Great Britain in respect of inland surface transport, being the Office for Nuclear Regulation;
- The Competent Authority of the United Kingdom of Great Britain and Northern Ireland in respect of sea transport, being the Secretary of State for Transport;
- The Competent Authority of the United Kingdom of Great Britain and Northern Ireland in respect of air transport, being the Civil Aviation Authority; and
- The Competent Authority of Northern Ireland in respect of road transport, being the Department of Agriculture, Environment and Rural Affairs - Northern Ireland

approve the design specified in Section 1 of this certificate, as submitted for approval by REVISS Services (UK) Ltd (see Section 4)

as: Special Form Radioactive Material.

Design identification: Capsule code R2089

Special Form Radioactive Material manufactured to this design meets the requirements of the regulations and codes on pages 3 and 4 subject to the following general condition and to the conditions in the succeeding pages of this certificate.

In the event of any alteration in the design of the Special Form Radioactive Material, the relevant management system(s) or in any of the facts stated in the application for approval, this certificate will cease to have effect unless the Competent Authority is notified of the alteration and the Competent Authority confirms the certificate notwithstanding the alteration.

Expiry Date: This certificate cancels all previous issues and is valid until the end of November 2028 (see Section 4).

COMPETENT AUTHORITY IDENTIFICATION MARK: GB/343/S



Signature:
Ian Barlow, Head of Transport Competent Authority

Date of Issue: 28 November 2023

Office for Nuclear Regulation
Redgrave Court, Merton Road
Bootle, Merseyside
L20 7HS

on behalf of the Office for Nuclear Regulation; the Secretary of State for Transport;
the Civil Aviation Authority; and the Department of Agriculture, Environment and
Rural Affairs - Northern Ireland.

REGULATIONS GOVERNING THE TRANSPORT OF RADIOACTIVE MATERIALS

INTERNATIONAL

International Atomic Energy Agency (IAEA)

SSR-6 Regulations for the Safe Transport of Radioactive Material 2018 Edition

United Nations Economic Commission for Europe (UNECE)

Agreement concerning the International Carriage of Dangerous Goods by Road (ADR) 2023 Edition

Intergovernmental Organisation for International Carriage by Rail (OTIF)

Regulations concerning the International Carriage of Dangerous Goods by Rail (RID) 2023 Edition

International Maritime Organization (IMO)

International Maritime Dangerous Goods (IMDG) Code 2020 Edition incorporating Amendment 40-20

International Civil Aviation Organization (ICAO)

Technical Instructions for the Safe Transport of Dangerous Goods by Air 2023-2024 Edition

UNITED KINGDOM

ROAD

GREAT BRITAIN ONLY:

The Energy Act 2013 (2013 c. 32); The Carriage of Dangerous Goods and Use of Transportable Pressure Equipment Regulations 2009 (SI 2009 No. 1348); The Energy Act 2013 (Office for Nuclear Regulation) (Consequential Amendments, Transitional Provisions and Savings) Order 2014 (SI 2014 No. 469)

NORTHERN IRELAND ONLY:

The Carriage of Dangerous Goods and Use of Transportable Pressure Equipment Regulations (Northern Ireland) 2010, (SR 2010 No 160)

RAIL

GREAT BRITAIN ONLY:

The Energy Act 2013 (2013 c. 32); The Carriage of Dangerous Goods and Use of Transportable Pressure Equipment Regulations 2009 (SI 2009 No. 1348); The Energy Act 2013 (Office for Nuclear Regulation) (Consequential Amendments, Transitional Provisions and Savings) Order 2014 (SI 2014 No. 469)

SEA

British registered ships and all other ships whilst in United Kingdom territorial waters: The Merchant Shipping Act 1995 (1995 c. 21); The Merchant Shipping (Dangerous Goods and Marine Pollutants) Regulations 1997 (SI 1997 No. 2367); Merchant

Shipping Notice MSN 1906 (M) The carriage of dangerous goods and marine pollutants: Amendments to international standards

AIR

The Air Navigation Order 2016 (SI 2016 No. 765); The Air Navigation (Dangerous Goods) Regulations 2002 (SI 2002 No.2786)

1. DESIGN SPECIFICATION

Material Design

- 1.1 The design of the Special Form Radioactive Material shall be in accordance with Application for Approval of a Capsule as Special Form Material, R2089SFA Issue 16 dated 16 August 2023, and modifications to the design approved by the authorities named on page 1 of this certificate under the established modifications procedure.

Design Drawings

- 1.2 The design is specified in the following drawings.

Title	Drawing / Drawing List	Issue	Date
Approved Drawings List For R2089 Capsule Design	QS2089	10	22 October 2008
Assembly of Capsule R2089	GA20890	F	22 June 2006

Material Specification

- 1.3 Capsule containing a source of Co-60 with a maximum activity of 740 TBq (20 kCi). The emitted radiations are gamma photons at 1.173 MeV and 1.332 MeV.
- 1.4 The physical form of the content is assemblies of stainless steel or zircaloy containing nickel-coated cobalt metal discs/cylinders and stainless steel spacers (if required) inside a special form capsule assembly.

2. USE OF MATERIAL

Actions Prior to Shipment

- 2.1 None specified.

3. MANAGEMENT SYSTEMS

- 3.1 The management system(s) assessed as adequate in relation to this design by the authorities named on page 1 of this certificate, at the date of issue, are as specified in 'Application for Approval of a Capsule as Special Form Material', R2089SFA referred to in Section 1 above, and comprise the following:

- REVISS Services (UK) Ltd. Quality Manual Issue 12 dated 28 July 2022.

- 3.2 No alteration may be made to any management system confirmed as adequate in relation to this design, unless:
- a) the authorities named on page 1 of this certificate have confirmed the amended management system is adequate prior to implementation or use;
or
 - b) the alteration falls within the agreed change control procedures set out in the management system(s).
- 3.3 Other management systems for design, testing, manufacture, documentation, use, maintenance, inspection, transport and in-transit storage operations may be used providing they comply with international, national or other standards for management systems agreed as acceptable by the authorities named on page 1 of this certificate.

4. CERTIFICATE STATUS

Design approval issued to:

REVISS Services (UK) Limited
 179 Brook Drive
 Milton Park
 Abingdon
 Oxfordshire
 OX14 4SD
 UK

Issue / Revision Number	Date of Issue	Date of Expiry	Reason for Revision
3	2 March 2009	28 February 2014	Renewal
4	7 November 2013	30 November 2018	Renewal
5	29 November 2018	30 November 2023	Renewal
6	28 November 2023	28 November 2028	Renewal