



U.S. Department of Transportation

# COMPETENT AUTHORITY CERTIFICATION FOR A TYPE B(U)

Pipeline and Hazardous Materials Safety Administration RADIOACTIVE MATERIALS PACKAGE DESIGN CERTIFICATE USA/9282/B(U), REVISION 6

The Competent Authority of the United States certifies that the radioactive material package design described in this certificate satisfies the regulatory requirements for a Type B(U) package as prescribed in the regulations of the International Atomic Energy Agency<sup>1</sup> and the United States of America<sup>2</sup> The package design is approved for use within the United States for import and export shipments made in accordance with applicable international and domestic transport regulations.

- 1. Package Identification SPEC-300.
- 2. Package Description and Authorized Radioactive Contents as described in U.S. Nuclear Regulatory Commission Certificate of Compliance No. 9282, Revision 5 (attached).
- 3. General Conditions
  - a. Each user of this certificate must have in his possession a copy of this certificate and all documents necessary to properly prepare the package for transportation. The user shall prepare the package for shipment in accordance with the documentation and applicable regulations.
  - b. Each user of this certificate, other than the original petitioner, shall register his identity in writing to the Office of Engineering and Research, (PHH-23), Pipeline and Hazardous Materials Safety Administration, U.S. Department of Transportation, Washington D.C. 20590-0001.

<sup>1</sup> "Regulations for the Safe Transport of Radioactive Material, 2018 Edition, No. SSR-6 (Rev. 1)" published by the International Atomic Energy Agency (IAEA), Vienna, Austria.

<sup>&</sup>lt;sup>2</sup> Title 49, Code of Federal Regulations, Parts 100-199, United States of America.

## CERTIFICATE USA/9282/B(U), REVISION 6

- c. This certificate does not relieve any consignor or carrier from compliance with any requirement of the Government of any country through or into which the package is to be transported.
- d. Records of Management System activities required by Paragraph 306 of the IAEA regulations<sup>1</sup> shall be maintained and made available to the authorized officials for at least three years after the last shipment authorized by this certificate. Consignors in the United States exporting shipments under this certificate shall satisfy the applicable requirements of Subpart H of 10 CFR 71.
- 4. Marking and Labeling The package shall bear the marking USA/9282/B(U) in addition to other required markings and labeling.
- 5. Expiration Date This certificate expires on May 30, 2030. Previous editions which have not reached their expiration date may continue to be used.

This certificate is issued in accordance with paragraph(s) 810 of the IAEA Regulations and Section 173.471 of Title 49 of the Code of Federal Regulations, in response to the April 29, 2025 petition by Source Production and Equipment Company, Inc., St. Rose, LA, and in consideration of other information on file in this Office.

Certified By:

William Schoonover

Associate Administrator for Hazardous

Materials Safety

May 22, 2025 (DATE)

Revision 6 - Issued to endorse U.S. Nuclear Regulatory Commission Certificate of Compliance No. 9282, Revision 5.

#### NRC FORM 618 U.S. NUCLEAR REGULATORY COMMISSION (8-2000) 10 CFR 71 CERTIFICATE OF COMPLIANCE FOR RADIOACTIVE MATERIAL PACKAGES d. PACKAGE IDENTIFICATION NUMBER a. CERTIFICATE NUMBER b. REVISION NUMBER c. DOCKET NUMBER **PAGES** 71-9282 USA/9282/B(U)-96 OF 3 9282 5 1

### 2. PREAMBLE

- a. This certificate is issued to certify that the package (packaging and contents) described in Item 5 below meets the applicable safety standards set forth in Title 10, Code of Federal Regulations, Part 71, "Packaging and Transportation of Radioactive Material."
- This certificate does not relieve the consignor from compliance with any requirement of the regulations of the U.S. Department of Transportation or b. other applicable regulatory agencies, including the government of any country through or into which the package will be transported.
- 3. THIS CERTIFICATE IS ISSUED ON THE BASIS OF A SAFETY ANALYSIS REPORT OF THE PACKAGE DESIGN OR APPLICATION
- a. ISSUED TO (Name and Address)

  Source Production
  and Equipment Company, Inc.
  113 Teal Street
  St. Rose, LA 70087-9691
- b. TITLE AND IDENTIFICATION OF REPORT OR APPLICATION
  Source Production and Equipment Company, Inc.
  application dated February 9, 2015.

### 4. CONDITIONS

This certificate is conditional upon fulfilling the requirements of 10 CFR Part 71, as applicable, and the conditions specified below.

5.

## (a) Packaging

(1) Model No.: SPEC-300

(2) Description

The SPEC-300 is a radiographic device that consists of a source assembly, a depleted uranium shield, and a stainless steel enclosure. The radioactive source assembly is housed in a zircaloy or titanium "S" tube that is surrounded by the depleted uranium shield. The depleted uranium shield is secured in the stainless steel enclosure. The void space between the depleted uranium shield and the enclosure is filled with high density polyurethane foam. The package is approximately 26 inches long, 14 inches wide, and 15 inches high (16.5 inches high when including the lifting eye blocks). The maximum gross weight of the package is 780 pounds.

(3) Drawings

The packaging is constructed and assembled in accordance with Source Production and Equipment Co., Inc. General Arrangement drawings: 19B000, sheets 1-8, Rev. 5, B190700, sheet 1, Rev. 5, and B190701, sheet 1, Rev. 1.

- (b) Contents
- (1) Type and form of material

Cobalt-60 sources which meet the requirements of special form radioactive material.

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- Contents (continued) 5.(b)
  - (2)Maximum quantity of material per package

11.1 TBq (300 Ci) (output)

Output curies are determined in accordance with American National Standard N432-1980, "Radiological Safety for the Design and Construction of Apparatus for Gamma Radiography."

- 6. The source shall be secured in the shielded position of the packaging by the source assembly lock. lock cap and safety plug assembly. The safety plug assembly, lock cap and source assembly must be fabricated of materials capable of resisting a 1475°F fire environment for one-half hour and maintaining their positioning function. The locking ball of the source assembly must engage the locking device. The flexible cable of the source assembly and safety plug assembly must be of sufficient length and diameter to provide positive positioning of the source in the shielded position.
- The name plate must be fabricated of materials capable of resisting the fire test of 10 CFR Part 71 7. and maintaining its legibility.
- In addition to the requirements of Subpart G of 10 CFR Part 71: 8.
  - The package shall be prepared for shipment in accordance with the Operating Procedures in (a) Chapter 7.0 of the application, as supplemented; and
  - The package must meet the Acceptance Test and Maintenance Program of Chapter 8.0 of (b) the application, as supplemented.
- The package authorized by this certificate is hereby approved for use under the general license 9. provisions of 10 CFR 71.17. \*\*\*\*
- 10. Expiration date: May 31, 2030.

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## **REFERENCES**

Source Production and Equipment Company, Inc., application dated February 9, 2015.

## FOR THE U.S. NUCLEAR REGULATORY COMMISSION

Signed by Diaz-Sanabria, Yoira on 05/16/25

Yoira Diaz-Sanabria, Chief Storage and Transportation Licensing Branch Division of Fuel Management Office of Nuclear Material Safety and Safeguards

Date: May 16, 2025

East Building, PHH-23 1200 New Jersey Ave, SE Washington, D.C. 20590



# U.S. Department of Transportation

Pipeline and Hazardous Materials Safety Administration

CERTIFICATE NUMBER: USA/9282/B(U)-96

## ORIGINAL REGISTRANT(S):

Source Production and Equipment Company, Inc. 113 Teal Street St. Rose, LA, 70087 USA

XCEL NDT 2755 State Highway 322 Longview, TX, 75603 USA

Metalogic Inspection Services 6529 Cunningham Rd Suite 2001 Houston, TX, 77041 United States