



Certificate

CDN/E170/-96 (Rev. 6)

Endorsement of Transport Package Design

No. USA/9263/B(U)-96 (Rev. 11)

The transport package design identified below is certified by the Canadian Nuclear Safety Commission pursuant to paragraph 21(1)(h) of the *Nuclear Safety and Control Act* and Section 7 of the *Packaging and Transport of Nuclear Substances Regulations*, and to the 1996 Edition (Revised) of the *IAEA Regulations for the Safe Transport of Radioactive Material*.

REGISTRATION OF USE OF PACKAGES

All users of this authorization shall register their identity in writing with the Canadian Nuclear Safety Commission prior to the first use of this authorization and shall certify that they possess the instructions necessary for preparation of the package for shipment.

PACKAGE IDENTIFICATION

Designer: **Source Production & Equipment Co., Inc.**
Make/Model: **SPEC-150 Exposure Device**
Mode of Transport: **Air , Sea , Road , Rail**

IDENTIFICATION MARK

The package shall bear the competent authority identification mark **"USA/9263/B(U)-96"**.

PACKAGE DESCRIPTION

The package consists of a rectangular welded titanium case in which there is a depleted uranium shield cast around an "S" tube of either titanium or zircalloy. The source is securely positioned in the "S" tube by means of a source cable locking device and a shipping plug. The containment system is the special form capsule. The approximate mass of depleted uranium is 17 kg.

An illustration of the package is shown on attached SPEC Drawing No. 15B000 (Rev. 10).



The configuration of the package is as follows:

Shape: Box	Shielding: Depleted Uranium
Mass: 24 kg	Outer Casing: Titanium
Length: 369 mm	Height: 142 mm
Width: 137 mm	Diameter: n/a

AUTHORIZED RADIOACTIVE CONTENTS

This package is authorized to contain not more than 5.55 TBq (150 Ci) output activity* of Selenium-75, Ytterbium-169 or Iridium-192 contained in sealed sources meeting the requirements of special form radioactive material within either the SPEC source assembly model G-60 as shown on SPEC Drawing No. B912000 (Rev. 1) or the QSA Global source assembly model 969.

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

QUALITY ASSURANCE

Quality assurance for the design, manufacture, testing, documentation, use, maintenance and inspection of the package shall be in accordance with:

- Foreign Certificate No. USA/9263/B(U)-96 (Rev. 11)
- Packaging and Transport of Nuclear Substances Regulations
- IAEA Regulations

SHIPMENT

The preparation for shipment of the package shall be in accordance with:

- Foreign Certificate No. USA/9263/B(U)-96 (Rev. 11)
- Packaging and Transport of Nuclear Substances Regulations
- IAEA Regulations

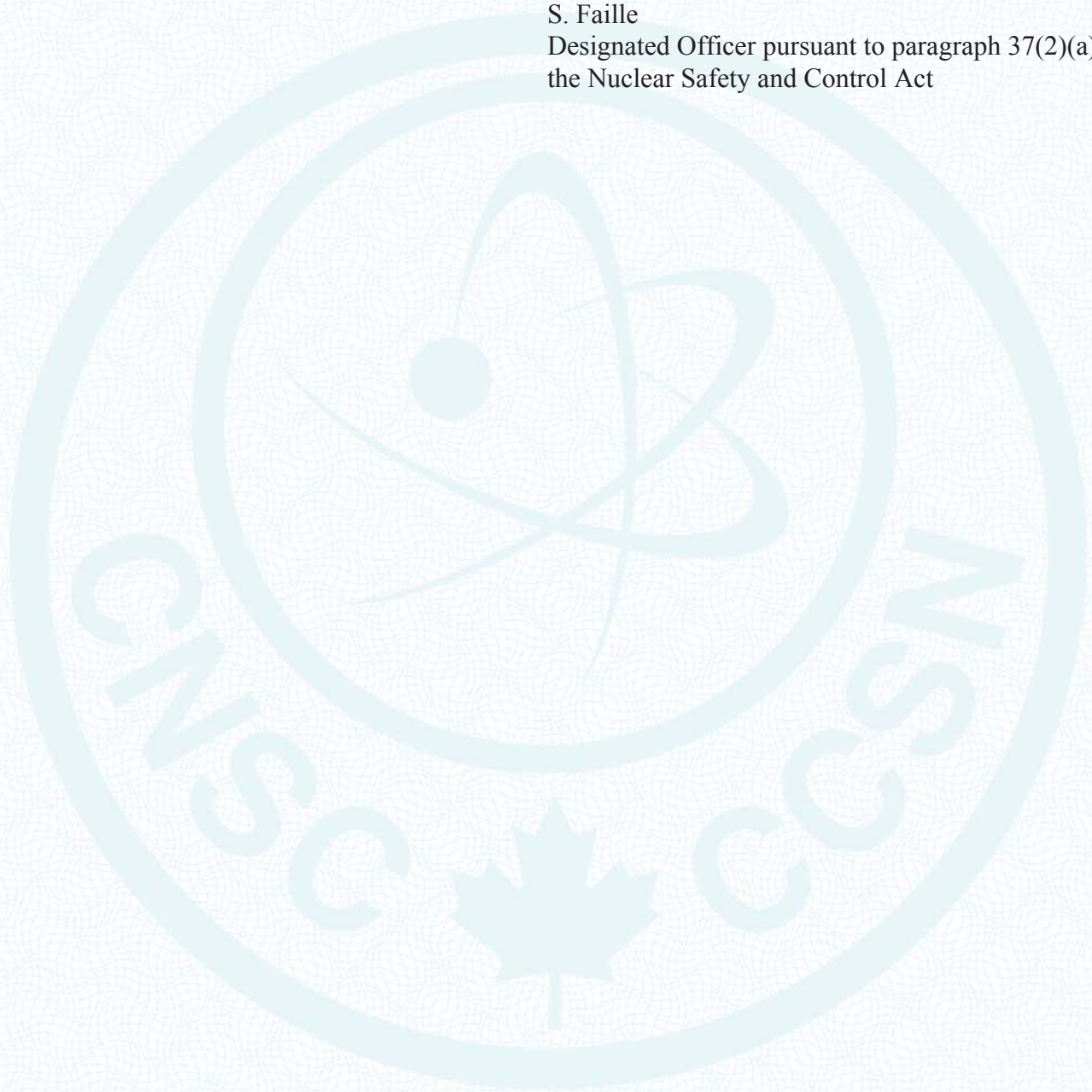
This certificate is valid only in Canada.



S. Faille

S. Faille

Designated Officer pursuant to paragraph 37(2)(a) of
the Nuclear Safety and Control Act

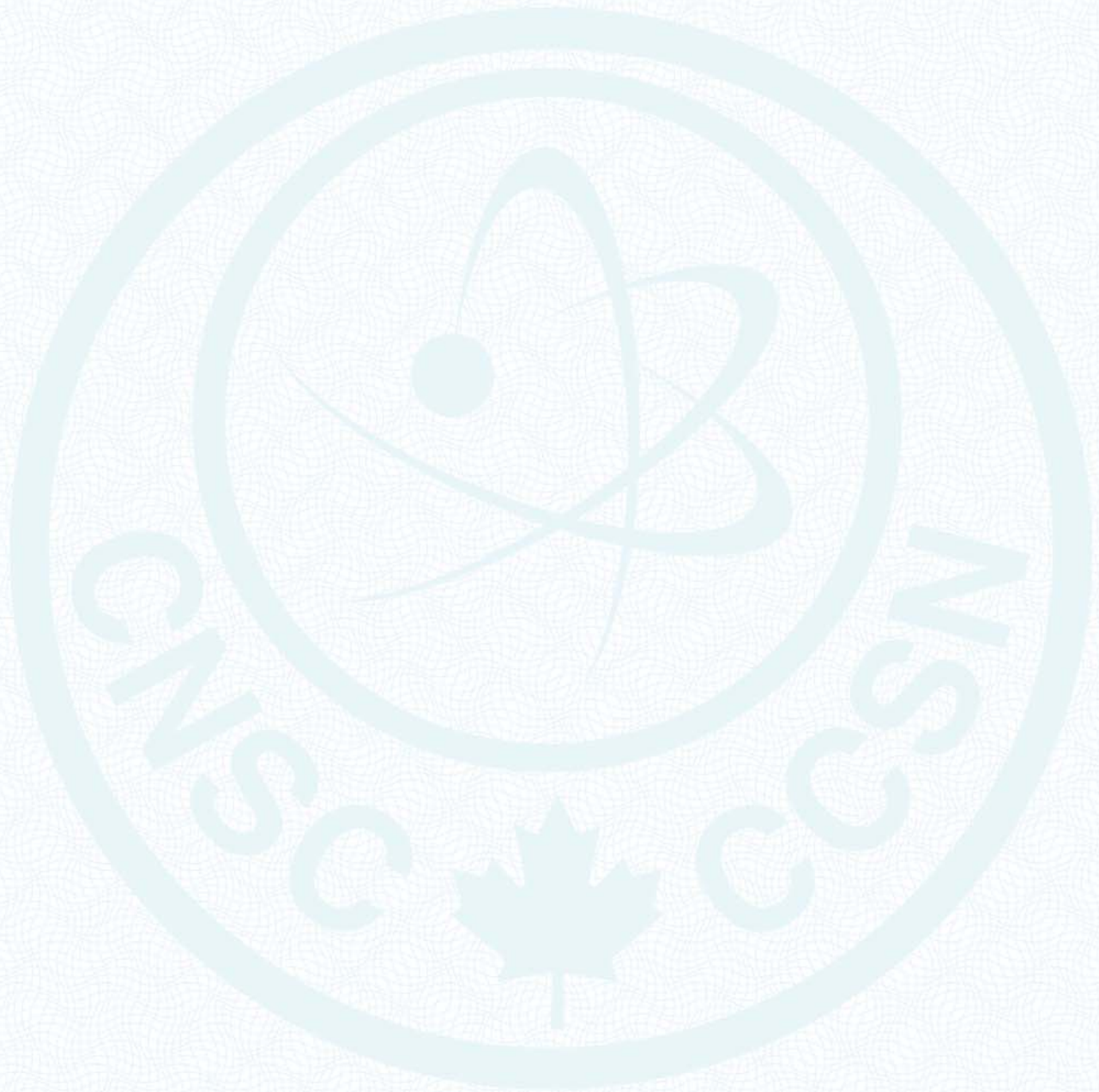




Canada's Nuclear Regulator
L'organisme de réglementation
nucléaire du Canada

NOTES

Revision 6: June 18, 2015. Incorporation of Rev. 11 of USDOT certificate.



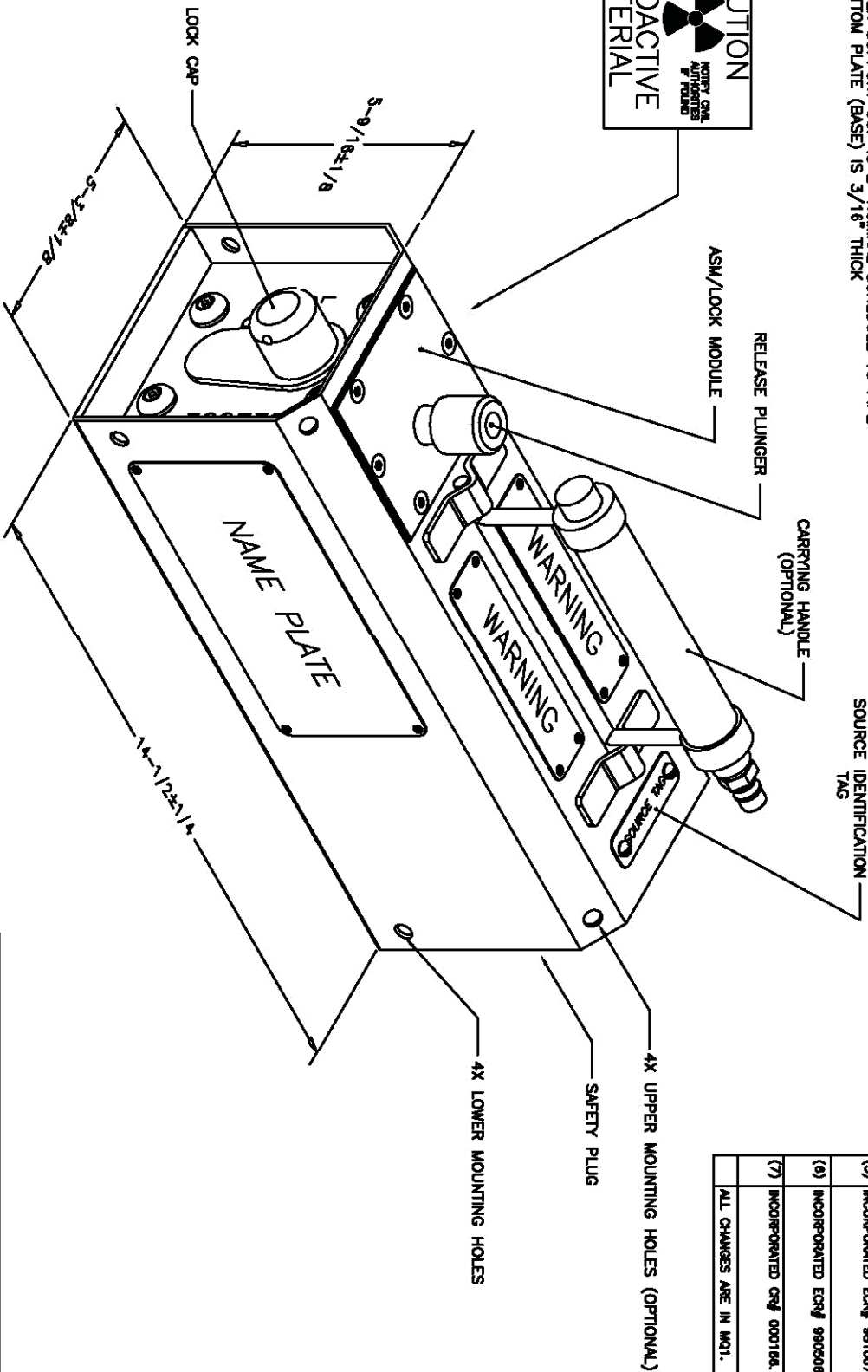
Canadian Nuclear
Safety Commission

Commission canadienne
de sûreté nucléaire

Canada

STATEMENTS OF FABRICATION:

1. SUPPLEMENTAL SHIELDING, IF NEEDED TO MEET NORMAL CONDITION DOSE RATE LIMITS, IS ATTACHED TO THE SHIELD OR OTHER PACKAGE COMPONENTS USING ALUMINUM EPOXY POTTING COMPOUND. THE SUPPLEMENTAL SHIELDING CONSISTS OF ONE POUND OR LESS OF DEPLETED URANIUM, TUNGSTEN OR LEAD.
2. MAXIMUM WEIGHT: 53.5 LBS.
3. SEE DRAWING 15B001-3 FOR MATERIAL SPECIFICATIONS FOR SERIAL NUMBERS 1475 AND NEWER. HOUSING COVER IS 3/32" THICK OUTLET END SUPPORT CUP & BULKHEADS ARE 1/8" THICK INNER SUPPORT CUP IS 2" NOMINAL SCHEDULE 10 PIPE BOTTOM PLATE (BASE) IS 3/16" THICK



CONTROLLED COPY NO

REVISIONS

REV	DESCRIPTION	DATE	APPROVED
(1)	SEE QA FILE FOLDER 15B000.	3-8-88 3-8-88	S. BYRD KC RDD
(2)	SEE QA FILE FOLDER 15B000.	4-2-88 4-5-88	S. BYRD KC RDD
(3)	SEE QA FILE FOLDER 15B000.	4-14-88 4-14-88	S. BYRD KC RDD
(4)	SEE QA FILE FOLDER 15B000.	9-21-88 9-21-88	S. BYRD KC RDD
(5)	INCORPORATED ECR# 881007-02.	10-15-88 4-20-89	S. BYRD RDD
(6)	INCORPORATED ECR# 890508-04.	5-8-88 5-8-88	S. BYRD RDD
(7)	INCORPORATED CR# 000188.	3-10-88 3-11-88	KP KR RDD
ALL CHANGES ARE IN MQ1.			

SOURCE PRODUCTION & EQUIPMENT CO., INC. 113 TEAL ST. ST. ROSE, LA 70087	
AS NOTED	APPROVALS
DO NOT SCALE DIMENSIONS	DESIGN IP 2-18-11
THROUGHOUT NAME	ISSUED MQ1
WEIGHT NAME	REV 1
OR CLERK N/A	SCALE: NTS
	00083310
	SHEET 1 of 1
	REV 10