

This procedure is applicable for a shipment of **radioactive material in a sealed source or solid compound** that meets the requirements of an excepted package **by road**. The procedure requires the user to have basic familiarity with radiation safety and TDG terms, and does not absolve any regulatory responsibility of the user that may be present. Stuart Hunt & Associates Ltd. makes no warranties on the suitability of this generic procedure for your particular situation. The procedure is provided as a convenience and reference only.

Radioactive material shipments that meets the requirements of an excepted package and is contained within acceptable packaging and is accompanied by a document that has the correct shipping name and UN number is exempt from the shipping document, labelling, packaging and training requirements of the *Transportation of Dangerous Goods* and *Packaging and Transport of Nuclear Substances* regulations.

Identifying an Excepted Package

Each radioactive source in the package must be below the following activities for the respective radioisotopes to be an excepted package.

Radioisotope	Special Form	Non-Special Form
Cesium-137	20 GBq	6 GBq
Americium-241	100 GBq	0.01 GBq
Cobalt-60	4 GBq	4 GBq
Cadmium-109	300 GBq	20 GBq
Nickel-63	400 GBq	300 GBq
Iron-55	400 GBq	400 GBq

Sources in excess of these values cannot be shipped as an excepted package and must be shipped as a Type A package.

The dose rate at 10 cm from any device containing a radioactive source must also be less an 0.1 mSv/hr (100 µSv/hr).

Packaging an Excepted Package

Any sturdy container (cardboard box, wooden crate, etc.) can be used as packaging for an excepted package. The container must be able to withstand normal transportation forces (hard acceleration or breaking) and be suitable for the size and mass of the content. The content must be packed in such a manner that any radiation warning symbols be clearly visible upon opening. If this is not possible, print the word "RADIOACTIVE" on a piece of paper and place it on top of the item before closing the container.

Sufficient shielding must be present in the container such that the radiation intensity on all exterior surfaces of the package is less than 0.005 mSv/hr (5 µSv/hr). If it is not possible to reduce the radiation intensity below 0.005 mSv/hr (5 µSv/hr), the material will have to be shipped as a Type A package.

Labelling an Excepted Package

The exterior of the package must have the following items:

1. The name and address of the consignor (shipper)
2. The name and address of the consignee (recipient)
3. The gross mass of the package if it is over 50 kg
4. The UN number of the material

Selecting the Correct Shipping Name and UN Number

If the shipment contains:	Use Shipping Name:	UN Number
- a radiation device	RADIOACTIVE MATERIAL, EXCEPTED PACKAGE, INSTRUMENT	UN 2911
- a sealed source outside of its device - a calibration standard - a check source	RADIOACTIVE MATERIAL, EXCEPTED PACKAGE, ARTICLE	UN 2911
- a compound	RADIOACTIVE MATERIAL, EXCEPTED PACKAGE, LIMITED QUANTITY OF MATERIAL	UN 2910

Transportation Documentation

On a document that accompanies the package, include the correct shipping name and UN number. This document can be a separate page or it can be placed on the carrier's waybill.