



Proper training is required under federal and/or state regulations to offer for shipment or transport dangerous goods and/or hazardous materials. All persons and entities must comply with all federal regulations, including but not limited to the specific training requirements of 49 CFR § 172.700 - 172.704.

## **IF YOU HAVE NOT BEEN TRAINED CONTACT YOUR RADIATION SAFETY OFFICER**

Radnostix/RadQual provide these materials as a service, to be used as guidelines to assist properly trained shippers. The materials provided by RadQual and Radnostix in no way alters or satisfies any federal training requirements. The attached information provided does not meet the training requirements as required by DOT 49 CFR.

The study and/or use of these materials do not qualify an individual to prepare, package, transport or otherwise handle dangerous goods or hazardous materials.

The information provided with this document is subject to change or update due to changing government regulations. The user(s) of this document assumes responsibility for complying with all applicable laws and regulations regarding the shipment of Dangerous Goods.

Radnostix/RadQual or their contract manufacturer shall not be held responsible for any loss, injury and/or damage caused by errors, omissions, misprints or misrepresentations of the contents of these documents or for any unauthorized or inappropriate use.

# Radioactive Material Shipment Packaging and Documentation Flow Chart

**1** Verify return source is free of removable contamination (leak test performed within last 6 months is adequate).

**7** Complete Yellow II Labels. Record radionuclide(s) and Total activity in the Contents and Activity lines. Record the T.I. from Step 6 in the Transport Index Block.

**2** Package return source, including Return Packing List, (F-108) inside the original cardboard shipping box using original packing materials.

**6** Determine the T.I. (unitless number equal to the max. dose rate in mr/hr at 1 m from package surface) Must be  $\leq 1.0$  to label Yellow II.

**3** Seal shipping box with packing tape; use tamper indicating tape or apply tamper indicating label.

**5** Determine the radionuclide(s) and current activity(ies) in units of MBq contained in the package.

**4** Perform radiation survey on-contact with package; determine maximum on-contact radiation level.

**YES**  
Is maximum on-contact radiation level  $\geq 0.5$  mr/hr?

**NO**

\* Return source shipped as Type A Quantity, **UN 2915** in accordance with applicable sections and paragraphs of Title 49 and guidance provided:

- **DO NOT** remove, cover or deface any of the original labels attached to the shipping package unless otherwise instructed below.
- Apply the following Labels, (supplied), to the package:
  - Yellow II Labels completed in Step (7) placed over the original Yellow II Labels on the package.
  - **Cargo Aircraft Only** Labels on same side as the Yellow II Labels (Does not apply to calibration or reference sources used for medical or research applications, reference DOT interpretation letter 24-0002).
  - Radioactive Material Type A Package UN 2915 sticker (same side as one of the Yellow II labels if not on original).
  - Return Authorization (F-115).
- Remove original address and/or FedEx shipping labels.
- Complete Block 1 of the FedEx Airbill.
- Complete Block 6 of the FedEx Airbill, by checking "Yes" as per attached Shipper's Declaration.
- Complete a Dangerous Goods (DG) form, the following information must be included on the form in the sequence listed:
  - UN Number = UN 2915
  - Proper shipping name = Radioactive material, Type A package
  - Class = 7
  - Radionuclide, physical and chemical form, and activity from Step (5). **Sources containing different radionuclides must be recorded separately.**
  - Number and Type of package = (1) DOT Type 7A
  - Label = Yellow II
  - Transport Index as T.I. = (value from Step (6))
  - Package Description = fiberboard box
  - Dimensions - (L) cm x (W) cm x (H) cm.
  - Shipper's 24 hr Emergency Phone Number - **IS NOT** provided by RadQual or Radnostix.
- Place 3 copies of the DG form, Guide 163 and the Airbill in FedEx Pouch provided.

## NOTES

- Shipper's Declaration of Dangerous Goods forms available on the web links provided on Form F-106.
- Form must be TYPED with **RED DASHED** border.
- Shipper responsible for all shipping costs, unless other arrangements have been made.
- Shipper may select a carrier other than FedEx.
- Package prepared and DG Form completed and signed by qualified and trained shipper.
- Refer to Title 49 §§172.101, 172.202-204, 172.403, 172.704, 173.403, 173.433. Other requirements apply.

\* Return source shipped as Limited Quantity, **UN 2910** in accordance with §173.421 and guidance provided:

- Remove or cover any of the original labels attached to the shipping package.
- Apply the following stickers, as supplied, to the package:
  - Radioactive Material Accepted Package UN 2910.
  - Return Authorization (F-115)
- Complete Block 1 of the FedEx Airbill
- Complete Block 6 of the FedEx Airbill, by checking "Yes" Shipper's Declaration not required.

## NOTES

- Shipper responsible for all shipping costs, unless other arrangements have been made.
- Shipper may select a carrier other than FedEx.
- Package prepared by qualified and trained shipper.