

RPR 14LQ. RADIOISOTOPE LIMITED QUANTITY SHIPMENT

This form is to be completed **for shipment of a Limited Quantity of Radioactive Material to a non-University licensee.** RPR 14VA, "UU-VA RADIOACTIVE MATERIAL TRANSFER", may be used as an equivalent form for transfers between the VAMC and the University. The individual desiring authorization to ship the material shall complete this form and submit it to the RSO's designee for approval **before the material is shipped.** **International shipments must attach RPR 14IS.**

Shipper (University of Utah Responsible User):

Name: _____ Phone: _____

Department: _____ Address: _____

Receiver (Individual and Organization):

Name: _____ Phone: _____

Address: _____

Authorization:

Receiver's License #: _____ Expiration Date: _____

Receiver's RSO: _____ Phone: _____

License copy on file? Yes or Other verification: _____

Package Contents and Hazardous Material Classification:

Initials

Contents

Radionuclide: _____ Activity: _____ mCi DOT A₂ Limit: _____ TBq
(_____ Ci)

Limited Quantity Criteria

_____ Solid material less than 10^{-3} A₂ (normal form) [173.425]

_____ Liquid material (other than Tritium) less than 10^{-4} A₂. [173.425]

_____ Tritiated water? (Y/N) _____ Concentration: _____ (TBq/L)

Less than total activity specified in 173.425. (if the concentration is less than 0.1 Ci/L than limit is 1,000 Ci, if concentration is between 0.1 Ci to 1.0 Ci/L than limit is 100 Ci, and if concentration is greater than 1.0 Ci/L than limit is 1.0 Ci)

_____ Less than 15 grams U-235. [173.421(a)(5)]

_____ Material meets the requirements to be shipped as an instrument or article as specified in 173.425.

Note: This does not apply to an instrument that has a check source attached to it. These values were intended for items such as radioactive compasses or gun sights.

_____ The package contains no hazardous material other than radioactive material.

Small quantities of flammable materials may take exceptions given the following [173.4]:

- _____ Less than Thirty (30) ml or thirty (30) g (1 ounce) of material
- _____ Inner receptacle constructed of plastic having a minimum thickness of no less than 0.2 mm, or glass or metal.
- _____ Removable closure of the Inner receptacle held securely in place with wire, tape or other positive means
- _____ Inner receptacle is packed with absorbent material that does not react chemically and is capable of absorbing the entire contents (if liquid) of receptacle

Container

- _____ The package meets the intents of 173.24 and 173.421.
- _____ A 4G box is being used to ship small quantity of flammable material [173.4]

Labels and Markings

- _____ Names of shipper and receiver on outside of package.
- _____ The following must be on outside of the package "Radioactive material, excepted package-limited quantity of material, UN2910."
- _____ If package is to be shipped on a passenger-carrying aircraft, the following certification is required on the shipping paper: "**The above-named materials are intended for use in, or incident to, research or medical diagnosis or treatment.**" [172.204(c)(4)]
- _____ The package bears the marking "Radioactive" on an internal surface in such a manner that a warning of the presence of radioactive material is visible on opening the package.
- _____ If a small quantity (<30 ml) of flammable liquid is also being shipped with the limited quantity of radioactive material, the following statement must appear on the *outside* of the package: "**This package conforms to the conditions and limitations in 49 CFR 173.4**" [173.4]

Prepared by (signature): _____ Date: _____

Initials

Radiation Survey

Exposure rates measured with _____ (Model) _____

Ser. No.: _____ Calibration date: _____

Maximum at surface = _____ mR/hr

_____ Less than 0.005mSv/h (0.5 mR/hr) at all points on the surface of the container. [173.421]

Contamination measured with _____ (Model) _____

Ser. No.: _____ Efficiency: _____ cpm/dpm Calibration date: _____

Count rates: Gross: _____ cpm Background: _____ cpm Net: _____ cpm

_____ Less than 110 Bq (3 nCi) or 6600 dpm alpha and less than 1100 Bq (30 nCi) or 66000 dpm beta-gamma removable contamination **per wipe of 300 cm²**. [173.443(a)]

Surveyed by (signature): _____

Date: _____

RSO approval (signature): _____

Date: _____

