



# *CERTIFICATE OF COMPLETION*

## *DOT HazMat Training for the*

### *Nuclear Medicine Technologist*

Method of Training:

Narrated power point presentation with review questions

Material Presented:

General awareness with the regulations, function specific regulations, and safety & security awareness pertaining the preparation and shipment of radioactive material

Trainer/Presenter:

Jason Tavel, MS, DABR, Licensed Medical Physicist

*I hereby certify that I have reviewed the entire narrated power point presentation with review questions. In addition to this presentation, I have reviewed my performance of these tasks.*

Name: \_\_\_\_\_ Signature: \_\_\_\_\_ Date: \_\_\_\_\_

ASTARITA ASSOCIATES, Inc.  
414 ROUTE 111 SMITHTOWN, NY 11787  
(631) 265-2950  
[www.AstaritaAssociates.com](http://www.AstaritaAssociates.com)

# EXCEPTED PACKAGE /RQ Table



	Form	Limited Quantity Derived Value <sup>2</sup>	Reportable Quantity (RQ) <sup>3</sup>
Co57	Normal	270mCi	100Ci
Cs137	Normal	16mCi	1Ci
Ge68	Normal	14mCi	10Ci
Gd153	Normal	240mCi	10Ci
Ba133	Normal	81mCi	10Ci
I125	Normal	81mCi	0.01Ci (10mCi)
Pd103	Normal	1100mCi	100Ci
Cs131	Normal	810mCi	1000Ci
Tc99m	Liquid	11mCi	100Ci
Tl201	Liquid	11mCi	1000Ci
Ga67	Liquid	8.1mCi	100Ci
I123	Liquid	8.1mCi	10Ci
I131	Liquid	1.9mCi	0.01Ci (10mCi)
F18	Liquid	1.6mCi	1000Ci
In111	Liquid	8.1mCi	100Ci
Xe133	Liquid	27mCi	1000Ci
Sr82	Liquid	0.5mCi	Not Listed
Sr85	Liquid	5.4mCi	10Ci
Rb82	Liquid	Not Listed	Not Listed
Sr89	Liquid	1.6mCi	10Ci
Sm153	Liquid	1.6mCi	100Ci
Mo99	Liquid	1.6mCi	100Ci

Notes :

1. If a package has more than one isotope, the max quantity defaults to the lower limit.
2. Normal Form –  $10^{-3} * A2$  Liquid Form  $10^{-4} * A2$  (49cfr173.435 2006 version)
3. RQ Value – 49cfr172.101



### Excepted Package Limited Quantity

Surface  $\leq 0.5\text{mR/hr}$

Less than LQ table limits

Contamination  $< 6600\text{dpm}/300\text{cm}^2$



### Radioactive I

Surface  $\leq 0.5\text{mR/hr}$

Exceeds LQ table limits

Contamination  $< 6600\text{dpm}/300\text{cm}^2$



### Radioactive II

Surface  $\leq 50\text{mR/hr}$

1 meter  $\leq 1\text{mR/hr}$

Exceeds LQ table limits

Contamination  $< 6600\text{dpm}/300\text{cm}^2$



### Radioactive III

Surface  $\leq 200\text{mR/hr}$

1 meter  $\leq 10\text{mR/hr}$

Exceeds LQ table limits

Contamination  $< 6600\text{dpm}/300\text{cm}^2$



**ASTARITA ASSOCIATES, Inc.**

**414 ROUTE 111 SMITHTOWN, NY 11787**

**(631) 265-2950**

**[www.AstaritaAssociates.com](http://www.AstaritaAssociates.com)**