



ARIZONA RADIATION REGULATORY AGENCY
RADIOACTIVE MATERIAL LICENSE

Pursuant to Chapter 4, Title 30, Arizona Revised Statutes, and Title 12, Chapter 1 of the Arizona Administrative Code, and in reliance on statements and representations made to the Agency by the licensee, a license is hereby issued authorizing the acquisition, reception, possession, use and transfer of the radioactive material listed in this license for the purposes and at the places specified. This license is subject to all applicable rules and Agency orders now or hereafter in effect and to the conditions specified. In accordance with application dated August 22, 2008, signed by Daniel Silvain, License Number 10-24 is hereby renewed in its entirety to read as follows: **ALL CHANGES ARE IN BOLD**

LICENSEE

- | | | | |
|-------------|---|-----------------------|---------------------|
| 1. NAME: | Board of Regents
d/b/a University of Arizona | 3. a. LICENSE NUMBER: | 10 -24 |
| | | b. AMENDMENT NO.: | 76 |
| 2. ADDRESS: | P.O. Box 245101
Tucson, Arizona 85724 | 4. EXPIRATION DATE: | September 30, 2013 |
| | | 5. CATEGORY: | A1 - BROAD ACADEMIC |

- | | | |
|--|------------------------------|---|
| 6. Radioactive material
(element and mass number) | 7. Chemical or physical form | 8. Maximum quantity licensee
may possess at any time |
| A. Any radioactive material
with atomic numbers 3
through 83 inclusively | A. Any | A. 37 GBq each nuclide
(1000 millicuries) |
| B. Hydrogen-3 | B. Any | B. 5.55 TBq (150 curies) |

This section omitted for security reasons.

- | | | |
|--------------------|--|------------------------------|
| E. Cobalt-60 | E. Sealed Source (U.S. Nuclear,
Type 375) S-400 | E. 2.8 GBq (75 millicuries) |
| F. Cesium-137 | F. Sealed Source (ORNL Dwg
#SK-193-D) S-399 | F. 333 GBq (9 curies) |
| G. Cesium-137 | G. As sealed sources in soil
moisture/density measurement
devices | G. 7.4 GBq (200 millicuries) |
| H. Radium-226 | H. Any | H. 185 MBq (5 millicuries) |
| I. Uranium-235 | I. Fission chamber (Reuter-
Stokes Models RSN-10-A and
RSN-314, West Model WL
6376) | I. 6.2 grams |
| J. Uranium-Natural | J. Any | J. 110 kilograms |

ARIZONA RADIATION REGULATORY AGENCY

RADIOACTIVE MATERIAL LICENSE

SUPPLEMENTARY SHEET

License Number: 10 -24
Amendment Number 76

K.	Uranium-Natural	K.	Fuel elements sub-critical assembly	K.	2,500 kilograms
L.	Uranium-Depleted	L.	Any	L.	100 kilograms
M.	Americium-241	M.	Any	M.	37 GBq (1 curie)
N.	Americium-241/Beryllium	N.	Sealed source in soil moisture/density measurement device	N.	37 GBq (1 curie)
O.	Thorium-Natural	O.	Any	O.	2 kilograms
P.	Curium-244/Carbon-13	P.	Sealed Source (Amersham Corp. Model CLN.PG1) S-212	P.	3.0 GBq (80 millicuries)
Q.	Californium-252	Q.	Sealed Source (Monsanto MRC-CF-195)	Q.	925 MBq (25 millicuries)
R.	Any nuclide with atomic number 84 thru 92.	R.	Enriched Standard Materials or Standards	R.	555 MBq (15 millicuries) each nuclide
S.	Any nuclide with atomic number 93 thru 95.	S.	Enriched Standard Materials or Standards	S.	37 MBq (1 millicurie) each Nuclide

9. Authorized Use:

A., B., H., I., L., M. and O. thru S.

Research and development, as defined in Arizona Administrative Code R12-1-102.

This section omitted for security reasons.

E. and F. To be used in J.L. Shepard and Associates Model 78-12M Beam Projector calibration device.

J. To be used as shielding.

K. To be used as fuel elements in sub-critical assembly.

G. and N. To be used in approved devices for soil moisture measurements and related functions.

ARIZONA RADIATION REGULATORY AGENCY
RADIOACTIVE MATERIAL LICENSE
SUPPLEMENTARY SHEET

License Number: 10-24
Amendment Number: 76

Pages three through five and this section omitted for security reasons.

29. Except as specifically provided otherwise by this license, the licensee shall possess and use the radioactive material described in Items 6, 7 and 8 of this license in accordance with the statements, representations and procedures contained in:
1. Letter with attachments, including the current Decommissioning Plan dated August 5, 2003, signed by Melvin C. Young, Ph.D.
 2. Letter with attachments, dated March 18, 2008, signed by Daniel Silvain.
 3. Application with attachments, dated August 22, 2008, signed by Daniel Silvain.
 4. Letter with attachments, dated October 14, 2008, signed by Keith Carsten.

The most recent statements, representations, and procedures shall govern if they conflict with previously submitted documents, unless otherwise specified by a license condition; and the Agency's rules shall govern the licensee's statements in applications or letters.


AUBREY V. GODWIN, DIRECTOR

PRK:AVG:sec

DATE ISSUED:
MAY 31 2009

SENSITIVE UNCLASSIFIED INFORMATION – OFFICIAL USE ONLY