TENNESSEE DEPARTMENT OF ENVIRONMENT AND CONSERVATION DIVISION OF RADIOLOGICAL HEALTH



RADIOACTIVE MATERIAL LICENSE

Pursuant to Tennessee Department of Environment and Conservation Regulations, and in reliance on statements and representations heretofore made by the licensee, a license is hereby issued authorizing the licensee to receive, acquire, possess and transfer radioactive material listed below; and to use such radioactive material for the purpose(s) and at the place(s) designated below. This license is subject to all applicable rules and regulations of the Tennessee Department of Environment and Conservation and orders of the Division of Radiological Health, now or hereafter in effect and to any conditions specified below.

LICENSEE		3. License number			
1. Name Target Instruments, Inc.				R-01097-B14	
2. Address 100 Midland Road		4. Expiration date			
				February 28, 2014	
Oak Ridge, TN 3	7830		5. File no.		
				R-01097	
6. Radioactive Material (Element and Mass Number) 8. Chemical and/or physical		al and/or physical for	m	Maximum Radioactivity and/or quantity of material which licensee may possess at any one time.	
See		Supplementary		Sheets	
10. Authorized Use					
See		Supplementary		Sheets	
CONDITIONS 11. Unless otherwise specified, the authorized place of use is the licensee's address stated in item 2, above.					
See		Supplementary		Sheets	
	see	Supplement	ary	Sheets	
Date of Issuance February 3, 20 Page1 of _4 Page	004 ages		By: Charles Arnott Health Physicist Commissioner Charles Arnott Charles Arnott		

TENNESSEE DEPARTMENT OF ENVIRONMENT AND CONSERVATION DIVISION OF RADIOLOGICAL HEALTH

RADIOACTIVE MATERIAL LICENSE

Supplementary Sheet

8. Chemical and/or

Physical Form

(Spectrum Techniques)

A. Sealed source

Page 2 of 4 Pages

License Number R-01097-B14

- 6. Radioactive Material (Element
- and Mass Number)
- A. Ba-133 Cd-109 Co-57 Co-60 Cs-137 Eu-152
 - Mn-54 Na-22 Or other sources
 - listed in Schedule RHS 8-3 of "State Regulations for Protection Against Radiation"

- 9. Maximum Radioactivity and/or Quantity of Material Which Licensee May Possess at Any One Time
- A. No single source to exceed 1 microcurie. Total not to exceed 450 microcuries.

10. Authorized use

A. In-house detector testing. Instrumentation research and development. Distribution of NARM sources to persons exempt from licensing pursuant to 1200-2-10-.04(3) of "State Regulations for Protection Against Radiation" in accordance with statements, representations, and procedures contained in documents referenced in Condition 19 of this license.

Conditions (continued)

- 12. The licensee shall comply with applicable provisions of 1200-2-4, 1200-2-5, and 1200-2-10 of "State Regulations for Protection Against Radiation."
- 13. A. Radioactive material authorized by this license shall be used by individuals who have been trained as referenced in Condition 19 of this license.
 - B. The Radiation Safety Officer for this license is Martin A. Norton.

TENNESSEE DEPARTMENT OF ENVIRONMENT AND CONSERVATION DIVISION OF RADIOLOGICAL HEALTH

RADIOACTIVE MATERIAL LICENSE

Supplementary Sheet

Page 3 of 4 Pages

License Number R-01097-B14

- 14. Licensed material shall be stored in accordance with statements, representations, and procedures contained in documents referenced in Condition 19 of this license.
- 15. The licensee shall not open sealed sources containing radioactive material.
- 16. The licensee shall conduct a physical inventory of all sources possessed under this license at intervals not to exceed six months. A record of this inventory shall be maintained for inspection by the Department.
- 17. The packaging, labeling, and distribution of sources containing NARM radioactive material shall be governed by the following:
 - A. The immediate container of each quantity or separately packaged fractional quantity of radioactive material shall bear a durable, legible label which:
 - (1) Identifies the radionuclide and the quantity of radioactivity, and
 - (2) Bears the words "Radioactive Material"
 - B. In addition to the labeling information required by Condition 17.A., the label affixed to the immediate container, or an accompanying brochure, shall:
 - (1) State that the contents are exempt from Licensing State requirements, and
 - (2) Bear the words "Radioactive Material Not for Human Use Introduction into Foods, Beverages, Cosmetics, Drugs, or Medicinals, or into Products Manufactured for Commercial Distribution is Prohibited Exempt Ouantities Should Not Be Combined", and
 - (3) Set forth appropriate additional radiation safety precautions and instructions relating to the handling, use, storage, and disposal of the radioactive material.
 - C. No more than ten (10) exempt quantities shall be sold or transferred in any single transaction. However, an exempt quantity may be composed of fractional parts of one or more of the exempt quantities provided the sum of the fractions shall not exceed unity.
 - D. Each exempt quantity shall be separately and individually packaged. No more than (ten) such packaged exempt quantities shall be contained in any outer

TENNESSEE DEPARTMENT OF ENVIRONMENT AND CONSERVATION DIVISION OF RADIOLOGICAL HEALTH

RADIOACTIVE MATERIAL LICENSE

Supplementary Sheet

Page 4 of 4 Pages

License Number R-01097-B14

package for transfer to persons exempt pursuant to 1200-2-10-.04 (3). The outer package shall be such that the dose rate at the external surface of the package does not exceed 0.5 millirem per hour.

- E. The licensee shall maintain records identifying, by name and address, each person to whom NARM radioactive material authorized in Item A. is transferred for use under 1200-2-10-.04 (3) or the equivalent regulations of a State having authority over such materials, and stating the kinds and quantities of radioactive material transferred. An annual summary report stating the total quantity of each radionuclide transferred under this license shall be filed with the Tennessee Department of Environment and Conservation, Division of Radiological Health, 3rd Floor L & C Annex, 401 Church Street, Nashville, Tennessee, 37243-1532. Each report shall cover the year ending June 30 and shall be filed within 30 days thereafter. If no transfers of radioactive material have been made pursuant to 1200-2-10-.04 (3) during the reporting period, the report shall so indicate.
- 18. No provision of this license relieves the licensee from compliance with other Federal, State and local laws, ordinances, and regulations applicable to the licensee's activities.
- 19. Except as specifically provided otherwise by this license, the licensee shall possess and use radioactive material described in Items 6, 8, and 9 of this license in accordance with statements, representations, and procedures contained in application dated November 19, 2003, with attachments.