



**Pipeline and Hazardous
Materials Safety Administration**

APPROVAL CA2009080014

SECOND REVISION

ISSUED BY THE COMPETENT AUTHORITY OF THE UNITED STATES

EXPIRATION DATE: March 31, 2015

1. **APPROVAL HOLDER:** Los Alamos National Laboratory
Operated by Los Alamos National
Security, LLC, for the
DOE National Security Administration,
U.S. Department of Energy
Washington, DC
2. **REGULATORY AUTHORITY:** Part 1; 1.1.2 of the International
Civil Aviation Organization's Technical Instructions for
the Safe Transport of Dangerous Goods by Air (ICAO TI).
3. **SYNOPSIS:** The Department of Energy (DOE) is authorized to
offer for transportation non-DOT specification containers
described as hermetically-sealed electron tube devices
containing the hazardous materials described in paragraph
5.a. below, in accordance with the provisions of this
approval.
4. **BASIS:** This approval is issued in response to The
Department of Energy (DOE)'s application dated August 4,
2009.
5. **PERIOD OF VALIDITY AND CONDITIONS OF APPROVAL:** This
approval does not provide relief from any requirements of
the Hazardous Materials Regulations except as stated
herein. This approval is valid until the posted expiration
date or until terminated by the Associate Administrator for
Hazardous Materials Safety.
 - a. **Approved Materials:** Only the following material(s)
may be transported under the terms of this approval.

Hazardous Materials Description			
Proper Shipping Name	Hazard Class/ Division	Identification Number	Packing Group
Argon, compressed	2.2	UN1006	N/A
Carbon dioxide	2.2	UN1013	N/A
Helium, compressed	2.2	UN1046	N/A
Krypton, compressed	2.2	UN1056	N/A
Neon, compressed	2.2	UN1065	N/A
Nitrogen, compressed	2.2	UN1066	N/A
Tetrafluoromethane	2.2	UN1982	N/A
Xenon, compressed	2.2	UN2036	N/A
Compressed gas, n.o.s. (mixtures of the gases listed above, with or without 5% or less methane)	2.2	UN1956	N/A

- b. Packaging: Packagings are non-DOT specification, metal, single trip, inside containers, described as hermetically sealed electron tube radiation sensors. The radiation sensors have diameters from 1/4 inch to 6 inches, volumes not exceeding 320 cubic inches water capacity, and design (operating) pressures from 25 psig to 440 psig. Each radiation sensor is designed and constructed in accordance with G.E. Reuter-Stokes Technical Specification number ER-Q-0050-6, Rev. B dated April 29, 2005 on file with the Office of Hazardous Materials Special Permits and Approvals (OHMSPA). The radiation sensor must be shipped in a strong outside packaging capable of withstanding a minimum drop test of four feet without breakage of the radiation sensor or rupture of the outside packaging. The design burst pressure of the radiation sensor must be:

(1) Three times the design pressure if equipped with a relief device; or

(2) Four times the design pressure if not equipped with a relief device.

6. **MODES OF TRANSPORTATION AUTHORIZED:** Passenger aircraft and cargo only aircraft.

7. **SPECIAL PROVISIONS:**

a. This approval in no way affects the need to obtain any required authorizations from other agencies of the United States Government or from the competent authorities of the countries of transit and destination.

b. A copy of this approval and a copy of DOT-SP 9880 must accompany the shipment made under the terms of this approval.

c. This approval in no way affects the need to obtain any required authorizations from other agencies of the United States Government or from the competent authorities of the countries of transit and destination.

d. All requirements of DOT-SP 9880 must be met.

8. **GENERAL PROVISIONS:**

a. Failure by any person to comply with the terms and conditions of this approval and the Hazardous Materials Regulations, 49 CFR Parts 171-180, may result in the modification, suspension or termination of that person's authority to use this approval. Failure to comply may also subject that person to penalties prescribed by 49 U.S.C. §§ 5123 and 5124. This approval may be modified, suspended or terminated in its entirety if that action is justified in light of changes in circumstances or additional information not available when this approval was issued. Unless immediate modification, suspension or termination is necessary to avoid a risk of significant harm to persons or property, before action is taken, that person will be notified and provided with an opportunity to show why the proposed action should not be taken.

b. Each "Hazmat employee," as defined in § 171.8, who performs a function subject to this approval must be

provided training on the requirements and conditions of this approval in addition to the training required by §§ 172.700 through 172.704.

c. Any person operating under the terms of this approval must comply with the security plan requirement in Subpart I of Part 172 of the HMR, when applicable.

Issued in Washington, D.C.

Dated: 04/20/2011

A handwritten signature in blue ink, appearing to read 'Wanda By', is written over a faint circular stamp.

For Dr. Magdy El-Sibaie
Associate Administrator for Hazardous Materials Safety

Address all inquiries to: Associate Administrator for Hazardous Materials Safety, Pipeline and Hazardous Materials Safety Administration, Department of Transportation, Washington, D.C. 20590. Attention: PHH-30.