REGISTRY OF RADIOACTIVE SEALED SOURCES AND DEVICES
SAFETY EVALUATION OF A SEALED SOURCE
(AMENDED IN ITS ENTIRETY)

No.: NR-0155-S-115-S DATE: December 6, 2005

SOURCE TYPE: Radioluminous Lamp

MODEL: 11739555

MANUFACTURER/DISTRIBUTOR: **Department of the Army**
U.S. Army TACOM Life Cycle Management Command
AMSTA-CS-CZR
(Previously U.S. Army Tank-Automotive & Armaments Command)
Rock Island, IL 61299-7630

ISOTOPE:	MAXIMUM ACTIVITY:
Hydrogen-3	0.8 Curie (29.6 GBq)

LEAK TEST FREQUENCY: Not Required*

*Users not using the sources under a master material license must have a license condition requiring that area contamination wipe tests are routinely taken of maintenance and storage areas, and whenever breakage of the source is suspected. The routine area contamination wipe tests must be performed at intervals no greater than 3 (three) months.

PRINCIPAL USE: (R) Gas Sources for use in Models M64 and M64A1

CUSTOM SOURCE: X YES _____ NO

CUSTOM USER: U.S. Department of Defense

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DESCRIPTION:

The Model 11739555 radioluminous lamp is a glass vial filled with tritium gas, and is painted on the inside surface with phosphorescent paint. The cross-sectioin of the vial is 0.10 x 0.14 inch (2.54 x 3.56 mm), with a nominal wall thickness of 0.03 inch (0.76 mm). The vial is bent in a 170 or 180 degrees are around the longer axis, with a radius of curvature of 0.5 inch (12.70 mm).

LABELING:

Marking and labeling shall be in accordance with MIL-STD-1458.

DIAGRAM:

See Attachments 1 & 2.

CONDITIONS OF NORMAL USE:

The source will be used in ambient environments throughout the world, which may include extreme temperature, humidity, or other environmental factors. The sources will be used on military weapons which may be subject to harsh handling conditions.

LIMITATIONS AND/OR OTHER CONSIDERATIONS OF USE:

- The device shall be distributed by the Department of the Army, **U.S. Army TACOM Life Cycle Management Command** (Previously Tank-Automotive & Armaments Command), AMSTA-CS-CZR , Rock Island, IL 61299-7630, for use by the U.S. Department of Defense anywhere in deemed acceptable by the licensee.

- Handling, storage, use, transfer, and disposal shall be determined by the licensing authority.

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SOURCE TYPE: Radioluminous Lamp

- This registration sheet and the information contained within the references shall not be changed without the written consent of the NRC.

SAFETY ANALYSIS SUMMARY:

Based on the review of the information and test data cited in the references, we continue to conclude that the Model 11739555 radioluminous lamp is acceptable for licensing purposes. Furthermore, we continue to conclude that the sources would be expected to maintain their containment integrity for the uses specified in this certificate.

REFERENCES:

The following supporting documents for the Model 11739555 radioluminous lamp are hereby incorporated by reference and are made a part of this registry document:

- Department of the Army letter dated March 20, 1995, requesting changes to specific certificates, and letters dated January 22, 2001, May 23, 2001, and March 24, 2004, with enclosures thereto.

- **Department of the Army email received September 23, 2005, with enclosures thereto.**

- U.S. Department of the Army License No. 12-00722-06.

ISSUING AGENCY:

US Nuclear Regulatory Commission

Date: December 6, 2005 Reviewer: **/RA/**
Tomas Herrera

Date: December 6, 2005 Concurrence: **/RA/**
Ujagar S. Bhachu

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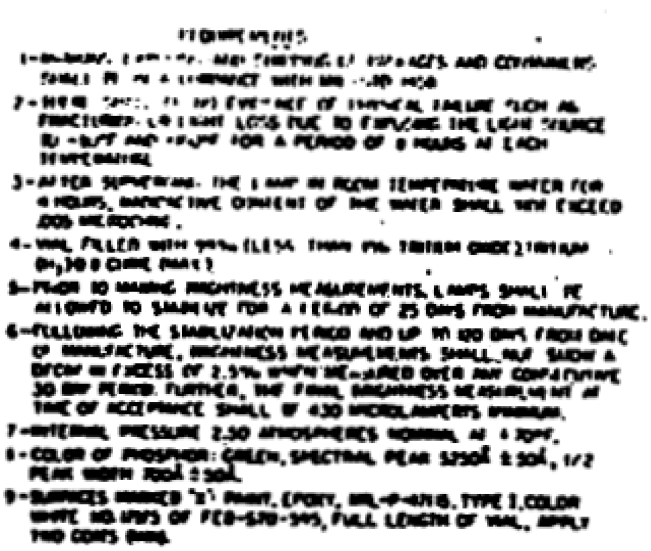
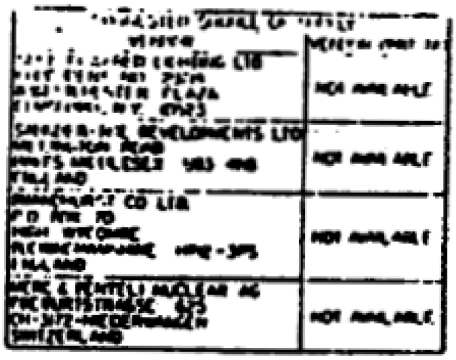
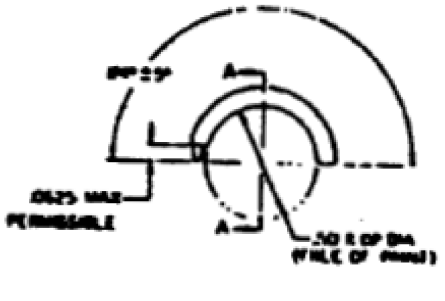
No.: NR-0155-S-115-S DATE: December 6, 2005 ATTACHMENT 1 OF 2







SOURCE USED ON:
M64 Sight Unit
(Telescope Reticle)

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