

**MATERIALS LICENSE**

Pursuant to the Atomic Energy Act of 1954, as amended, the Energy Reorganization Act of 1974 (Public Law 93-438), and Title 10, Code of Federal Regulations, Chapter I, Parts 30, 31, 32, 33, 34, 35, 36, 39, 40, and 70, 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 byproduct, source, and special nuclear material designated below; to use such material for the purpose(s) and at the place(s) designated below; to deliver or transfer such material to persons authorized to receive it in accordance with the regulations of the applicable Part(s). This license shall be deemed to contain the conditions specified in Section 183 of the Atomic Energy Act of 1954, as amended, and is subject to all applicable rules, regulations, and orders of the Nuclear Regulatory Commission now or hereafter in effect and to any conditions specified below.

Licensee		In accordance with letter dated <b>April 14, 2000</b> , and <b>facsimile dated February 15, 2001</b>
1. Department of the Army U.S. Army Tank-Automotive and Armaments Command-Rock Island ATTN: AMSTA-LC-SF Rock Island, IL 61299-7630		3. License number 12-00722-06 is amended in its entirety to read as follows:
		4. Expiration date August 31, 2008
		5. Docket No. 030-13027 Reference No.
6. Byproduct, source, and/or special nuclear material	7. Chemical and/or physical form	8. Maximum amount that licensee may possess at any one time under this license
A. Hydrogen-3	A. Gas in sealed glass ampoules	A. <input checked="" type="checkbox"/> Not to exceed 10 curies (370 GBq) per device (See Condition No. 10)
B. Hydrogen-3	B. Gas in sealed glass ampoules	B. <input type="checkbox"/> Not to exceed 10.2 curies (377 GBq) per device (See Condition No. 10)
C. Hydrogen-3	C. Gas in sealed glass ampoules	C. <input type="checkbox"/> Not to exceed 5.79 curies (213 GBq) per unit (See Condition No. 10)
D. Promethium-147	D. <input checked="" type="checkbox"/> 3M Model JE2X Sealed Glass encapsulated ceramic bound sources in rifle sights	D. <input type="checkbox"/> One millicurie per sight, total not to exceed one curie
E. Hydrogen-3	E. Tritium gas sealed in glass in rifle sights	E. <input type="checkbox"/> Nine millicuries per sight, total not to exceed nine curies
F. Hydrogen-3	F. Sealed glass ampoules in sights (Mb Microtec AG Model Nos. 400/1, 400/2, 400/3, 400/4, 400/5 or 400/6)	F. <input type="checkbox"/> No single sight to exceed 210 millicuries, 42 curies total

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SUPPLEMENTARY SHEET**License Number  
12-00722-NRDocket or Reference Number  
030-13027**Amendment No. 39****9. Authorized Use:**

- A. To be used in fire control devices containing self-luminous tritium sources and for possession incident to maintenance and repair of these devices and installation into artillery systems.
- B. For use in Muzzle Reference Sensors (MRS) on the family of main battle tanks used by the United States military services.
- C. For use in the M67 sight unit on the M120 and M121, 120MM mortar.
- D. and E. For possession incident to collection and disposal as radioactive waste only.
- F. To be used in Ranger Antiarmor Antipersonnel Weapon system for enhanced night firing capability.

**CONDITIONS**

- 10. The total possession limit for Hydrogen-3 shall not exceed  $1.5 \times 10^6$  curies (55-PBq).
- 11. A. Licensed material listed in Item 6.A. through 6.C. and 6.F. may be stored at Rock Island Arsenal, Rock Island, Illinois and at Blue Grass Army Depot, Richmond, Kentucky and may be used at U.S. Army, National Guard and Marine Corps installations and temporary job sites throughout the United States and any other location where the Commission maintains jurisdiction for regulating the possession and/or use of licensed material. Ampoules containing hydrogen-3 shall not be opened or removed from fire control devices except as necessary for device repair and maintenance only at facilities that meet criteria for depot level maintenance as described in application dated October 29, 1997.
- B. Licensed material listed in Items 6.D. and 6.E. may be possessed incident to collection and disposal as radioactive waste only throughout the United States and any other location where the Commission maintains jurisdiction for regulating the possession of licensed material.
- 12. A. Licensed material shall be used by, or under the supervision of, Jeffrey Havenner or U.S. Army, National Guard and Marine Corps, civilian and/or military personnel trained in accordance with application dated October 29, 1997.
- B. Radiation Safety Officer: Jeffrey Havenner
- C. Alternate Radiation Safety Officer: Tim Mohs
- 13. Sealed sources containing licensed material shall not be opened.
- 14. The licensee is authorized to transport licensed material only in accordance with the provisions of 10 CFR Part 71, "Packaging and Transportation of Radioactive Material."

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15. The licensee shall conduct a physical inventory every twelve (12) months to account for all sealed sources received and possessed under the license. The records of the inventories shall be maintained for inspection by the Commission, and shall include the quantities and kinds of byproduct material, location of sealed sources and the date of the inventory.
16. Notwithstanding the color requirements in 10 CFR 20.1901 (a), the licensee is authorized to label fielded items of equipment with colors as described in letter dated October 29, 1997.
17. Except as specifically provided otherwise in this license, the licensee shall conduct its program in accordance with the statements, representations, and procedures contained in the documents, including any enclosures, listed below. The U.S. Nuclear Regulatory Commission's regulations shall govern unless the statements, representations, and procedures in the licensee's application and correspondence are more restrictive than the regulations.
- A. Application dated October 29, 1997 (with enclosures) excluding Item 10, Subitem 11, addressing decommissioning;
- B. Letters dated October 29, 1997, May 13, 1998, May 26, 1998 (requesting deletion of Item 11, "Decommissioning" from application dated October 29, 1997) August 14, 1998, March 18, 1999, November 29, 1999, December 6, 1999 (excluding Page 2, first paragraph, regarding Depot Maintenance Worker training), December 9, 1999, and May 2, 2000; and
- C. Facsimiles dated May 18, 1999, March 14, 2000 and February 15, 2001.

FOR THE U.S. NUCLEAR REGULATORY COMMISSION

Date MAR 21 2001

By Loren J. Hueter  
Loren J. Hueter  
Materials Licensing Branch  
Region III