

**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.

<p style="text-align: center;">Licensee</p> <p>1. Department of the Army U. S. Army Research, Development and Engineering Command Army Research Laboratory</p> <p>2. Aberdeen Proving Ground, Maryland 20115-5066</p>	<p>In accordance with the letter dated May 19, 2008,</p> <p>3. License number SMB-141 is amended in its entirety to read as follows:</p> <hr/> <p>4. Expiration date June 30, 2011</p> <hr/> <p>5. Docket No. 040-06394 Reference No.</p>
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<p>6. Byproduct, source, and/or special nuclear material</p> <p>A. Natural Uranium</p> <p>B. Depleted Uranium</p> <p>C. Thorium 232</p> <p>D. Transuranics and technetium-99 contaminants in depleted uranium</p>	<p>7. Chemical and/or physical form</p> <p>A. Metal and metal oxide</p> <p>B. Metal and metal oxide</p> <p>C. Metal and metal oxide</p> <p>D. Contaminants contained in depleted uranium metal and metal oxide</p>	<p>8. Maximum amount that licensee may possess at any one time under this license</p> <p>A. 100 kilograms</p> <p>B. 200,000 kilograms</p> <p>C. 100 kilograms</p> <p>D. Not to exceed 100 picocuries per gram (pCi/g) per transuranic radionuclide and 500 pCi/g total transuranics; nor to exceed 500 pCi/g technetium-99 kilograms</p>
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9. Authorized use:

A. through D. Research and development as defined in 10 CFR 30.4; fabrication, modification, testing of components, parts and/or devices; laboratory analysis and measurement studies; calibration of the licensee's instruments; munitions testing; and possession and handling of waste from other Department of the Army tenants located at Aberdeen Proving Ground and Adelphi Laboratory Center.

CONDITIONS

10. Licensed material may be used or stored at the licensee's facilities located at Aberdeen Proving Ground, Maryland or Adelphi Laboratory Center, 2800 Powder Mill Road, Adelphi, Maryland, and at temporary job sites of the licensee anywhere in the United States.

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11. Licensed material shall only be used by, or under the supervision of, individuals designated, in writing, by the Radiation Safety Committee. The licensee shall maintain records of individuals designated as users for 3 years following the last use of licensed material by the individual.
12. The Radiation Safety Officer for this license is Richard A. Markland.
13. The licensee shall not use licensed material in or on human beings except as provided otherwise by specific condition of this license.
14. The licensee shall not use licensed material in field applications where it is released except as provided otherwise by specific condition of this license.
15. The licensee is authorized to transport licensed material in accordance with the provisions of 10 CFR Part 71, "Packaging and Transportation of Radioactive Material."



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16. 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 April 13, 2001 [ML011140434]
  - B. Letter dated July 30, 2001 [MK012200458]
  - C. Letter dated December 11, 2007 [ML073551110]
  - D. Letter dated January 3, 2008 [ML080090391]
  - E. R-14 Range Decommissioning Plan [ML073180538, ML073180578, ML073180594, ML073180601, ML073180603, ML073180560] and letters dated February 20, 2008 [ML080660644] and May 7, 2008 [ML081480447]
  - F. Building 1103A Area Decommissioning Plan [ML081550541, ML081550549, ML081550553, ML081550557, and ML081550561]



For the U.S. Nuclear Regulatory Commission

Date November 20, 2008

By

***Original signed by Elizabeth Ullrich***

Elizabeth Ullrich  
Commercial and R&D Branch  
Division of Nuclear Materials Safety  
Region I  
King of Prussia, Pennsylvania 19406