

U.S. NUCLEAR REGULATORY COMMISSION

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 20115-5067</p>	<p>In accordance with the application dated September 18, 2015,</p> <p>3. License number SMB-141 is amended in its entirety to read as follows:</p> <hr/> <p>4. Expiration date July 31, 2021</p> <hr/> <p>5. Docket No. 040-06394 Reference No.</p>
--	--

- | | | |
|---|--|---|
| <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. Thorium 230</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. Solid, Plated Source</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. 36 nanocuries per source and 144 nanocuries total</p> |
|---|--|---|

9. Authorized use:
- A. through C. 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 processing and handling of waste from other Department of the Army tenants located at Aberdeen Proving Ground and Adelphi Laboratory Center.
- D. Calibration and checking of the licensee's instruments.

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.
11. A. 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.

**MATERIALS LICENSE
SUPPLEMENTARY SHEET**License Number
SMB-141Docket or Reference Number
040-06394

Amendment No. 36

- B. The Radiation Safety Officer for this license is Patrick Marine.
12. The licensee shall not use licensed material in or on human beings.
13. The licensee shall not use licensed material in field applications where it is released except as provided otherwise by specific condition of this license.
14. Sealed sources or detector cells containing licensed material shall not be opened or sources removed from source holders by the licensee.
15. The licensee shall conduct a physical inventory every six months, or at other intervals approved by the U.S. Nuclear Regulatory Commission, to account for all sources and/or devices received and possessed under the license. Records of inventories shall be maintained for 5 years from the date of each inventory and shall include the radionuclides, quantities, manufacturer's name and model numbers, and the date of the inventory.
16. The licensee is authorized to transport licensed material in accordance with the provisions of 10 CFR Part 71, "Packaging and Transportation of Radioactive Material."
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. Letter dated May 31, 2011 (ML111590787)
B. Application dated September 18, 2015 (ML15273A388)

For the U.S. Nuclear Regulatory Commission

Original signed by Dennis R. LawyerDate October 9, 2015

By

Dennis R. Lawyer
Commercial, Industrial, R&D and Academic Branch
Division of Nuclear Materials Safety
Region I
King of Prussia, Pennsylvania 19406