

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 the applicable parts of Title 10, Code of Federal Regulations, Chapter I, Parts 19, 20, 30, 31, 32, 33, 34, 35, 36, 39, 40, 51, 70, and 71, 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. United States Army Installation Command</p> <p>2. 2511 Jefferson Davis Highway Arlington, Virginia 22202</p>	<p>3. License Number</p> <hr/> <p>4. Expiration Date December 31, 2022</p> <p>5. Docket No. 40-9083 Reference No.</p>
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<p>6. Source Material</p> <p>Uranium (depleted)</p>	<p>7. Chemical and/or Physical Form</p> <p>Any</p>	<p>8. Maximum amount that Licensee May Possess at Any One Time Under This License</p> <p>8,000kg</p>
<p>9. Authorized Use: Activities necessary for the possession and management of depleted uranium spotting rounds and fragments as a result of previous use of depleted uranium at US Army installations. These activities include:</p> <ul style="list-style-type: none"> A. Activities necessary to maintain the facilities in a safe condition and to prevent the unauthorized removal of licensed material from the authorized places of use; B. Activities necessary to determine the presence of licensed material at US Army facilities; C. Activities necessary to monitor the radiological environmental conditions in and around the authorized places of use to determine if licensed material is being transported in the environment; and D. Activities necessary for the packaging, transport and disposal of incidentally identified licensed material to a licensed/permitted disposal facility. 		

LICENSE CONDITIONS

- 10. The authorized places of possession shall be United States Department of Army Installations at Schofield Barracks HI, and Pohakuloa Training Area, HI.
- 11. The licensee shall conduct operations in accordance with the commitments, representations, and statements contained in the License Application dated November 6, 2008, the Physical Security Plan dated February 17, 2011, the Radiation Safety Plan dated June 22, 2011, and the Pohakuloa training Area and Schofield Barracks Environmental Radiation Monitoring Plans dated February 3, 2012 (jointly referred to as the approved license application). The approved license application is hereby incorporated by reference, except where superseded by license condition(s) below.
- 12. The licensee will provide the Nuclear Regulatory Commission (NRC) with a schedule for the submission

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of license amendment requests to incorporate the following list of sites: Forts Benning and Gordon (Georgia); Fort Campbell (Kentucky); Fort Carson (Colorado); Fort Hood (Texas); Fort Knox (Kentucky); Joint Base Lewis-McChord and the Yakima Training Center (Washington); Fort Bragg (North Carolina); Fort Polk (Louisiana); Fort Sill (Oklahoma); Fort Jackson (South Carolina); Fort Hunter Liggett (California); Fort Greeley (Alaska); Fort Dix (New Jersey); and Fort Riley (Kansas) on this license by **[insert date 90 days from date of issuing license]**. Any revisions to the site list will be submitted to NRC.

12a. The licensee shall submit the license amendment requests in accordance with this schedule.

12b. Each amendment request will include site/installation-specific Radiation Safety Plans, Environmental Radiation Monitoring Plans, Physical Security Plans, decommissioning Financial Assurance, and the names, training, and qualifications specific to depleted uranium of the Garrison Radiation Safety Officer.

13. If the licensee identifies information indicating that Davy Crockett-related depleted uranium may be present at a US Army installation not identified in License Condition 10 or included on the schedule developed under License Condition 12, the licensee will notify the NRC in writing within 15 days of the identification of this information. The licensee will evaluate the information and provide the NRC with a schedule for evaluating the presence of depleted uranium at the installation within 90 days of the identification of the information.
14. If it is determined that Davy Crockett-related depleted uranium is present at an US Army installation not listed in License Condition 10, or 12 the licensee shall submit a request to include the installation on this license. The request will include a Radiation Safety Plan, an Environmental Radiation Monitoring Plan, a Physical Security Plan, decommissioning Financial Assurance and the names, training and qualifications specific to depleted uranium of the Garrison Radiation Safety Officer. Any additional procedures necessary to ensure compliance with License Conditions 9A - 9D that are not included in the licensee's application dated November 6, 2008 will also be included in the request.
15. The licensee shall notify the NRC within 60 days of a change in the Garrison Radiation Safety Officer. The notification shall include the name, training, and qualifications specific to depleted uranium of the assigned Garrison Radiation Safety Officer.
16. The licensee shall consult with the U.S. Fish and Wildlife Service prior to taking any action relating to the depleted uranium that may impact a critical habitat or a threatened or endangered species.
17. The licensee shall submit site-specific financial assurance instruments and decommissioning cost estimates, consistent with the requirements in 10 CFR Part 40, for the Schofield Barracks and Pohakuloa Training Area within 90 days of the issuance of this license.
18. The licensee shall submit an updated site/installation specific decommissioning cost estimate and financial assurance instrument for each Army installation listed in License Condition 10 on a tri-annual basis, by December 31 of each year.
19. The licensee shall not fire high-explosive munitions into areas containing depleted uranium without first informing NRC 14 working days prior to the date that the high-explosive munitions will be fired.

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20. The licensee shall post "Caution - Radioactive Material" signs at a sufficient number of locations around the Radiation Control Area to ensure that individuals entering the Radiation Control Area are aware of the presence of depleted uranium. The signs may be placed at the perimeter of the range impact areas if posting them at the Radiation Control Area boundary is unsafe due to the presence of unexploded ordnance.
21. The licensee shall not perform any decommissioning or ground disturbing activities to collect or remove depleted uranium fragments or contaminated soil that is identified during routine range activities at the Schofield Barracks or Pohakuloa Training Area without prior authorization from NRC.
22. NRC or Agreement State licensed contractors may undertake decommissioning or ground disturbing activities to collect or remove depleted uranium fragments or contaminated soil that is identified during routine range activities at the Schofield Barracks or Pohakuloa Training Area consistent with the conditions and commitments of their license(s).
23. When the licensee engages an NRC or Agreement State licensed contractor to undertake decommissioning or ground disturbing activities to collect or remove depleted uranium fragments or contaminated soil that is identified during routine range activities at the Schofield Barracks or Pohakuloa Training Area, the licensee will notify NRC 6 months prior to the commencement of the activity. The licensee shall provide NRC with the contractor's site-specific decommissioning plans and all other documents associated with radiation safety and environmental monitoring associated with the proposed decommissioning or ground disturbing activities at least 6 months prior to the commencement of the activity. If issues are identified by NRC that could impact radiological health and safety, they will be resolved prior to the commencement of the activity.
24. The licensee will ensure that, prior to any decommissioning or ground disturbing activities to collect or remove depleted uranium fragments or contaminated soil that is identified during routine range activities at the Schofield Barracks or Pohakuloa Training Area, the area is evaluated in accordance with the 2004 Programmatic Agreement (PA) entitled "Programmatic Agreement (PA) among the United States Army Garrison Hawaii, the Hawai'i State Historic Preservation Office and the Advisory Council on Historic Preservation for Section 106 Responsibilities for the Army Transformation of the 2nd Brigade, 25th Infantry Division (light) to a Stryker Brigade," or its successor document.
25. The licensee shall prepare a detailed Environmental Radiation Monitoring Report and submit it to NRC within 60 days of January 1 of each year.
26. The licensee shall perform continuous air sampling at both the Pohakuloa Training Area and Schofield Barracks in a minimum of four (4) suitable locations that are downwind from the Radiation Control Area for each facility. Locations shall be based on wind rose maps of at the Pohakuloa Training Area and Schofield Barracks ranges. Samples should be taken and analyzed on a quarterly basis.
27. The licensee shall revise the Environmental Radiation Monitoring Plans for the Schofield Barracks and Pohakuloa Training Area as outlined below. The licensee shall implement the environmental monitoring in accordance with the revised Environmental Radiation Monitoring Plans.
- a) The licensee shall sample the plant species that are located next to or near depleted uranium

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fragments in both the Schofield Barracks and Pohakuloa Training Area Radiation Control Areas to determine if the depleted uranium is being absorbed by the plants. The licensee shall also take plant samples in those locations where air sampling is conducted to determine if there has been any depleted uranium uptake by plants at those locations.

- b) The licensee shall perform soil sampling as close as practicable to the Pohakuloa Training Area and Schofield Barracks Radiation Control Areas to determine if depleted uranium is being, or has been, blown outside of the Radiation Control Area. The soil samples shall be collected at the locations of air sampling and be determined based upon the Pohakuloa Training Area and Schofield Barracks wind rose data and potential exposure pathways to members of the public. If depleted uranium is identified on a vehicle leaving the Radiation Control Area and the vehicle is washed down to remove the depleted uranium, the wash water and soil in the wash down area will be evaluated for depleted uranium.
- c) When analytical sampling results from locations outside of the Radiation Control Area indicate that the U-238/U-234 activity ratio exceeds 3, the licensee shall notify NRC within 30 days and collect additional environmental samples within 30 days of the notification of NRC, unless prohibited by the absence of the sampling media.
- d) The licensee shall provide a map or diagram with greater clarity identifying where the soil sampling locations at the Pohakuloa Training Area are relative to the Radiation Control Area and the egress points. The Figure shall include the global positioning system (GPS) coordinates of the sample locations.
- e) The licensee shall include depleted uranium analysis of the groundwater samples from the existing groundwater monitoring program and the remedial investigation to demonstrate that depleted uranium is not impacting groundwater at the Schofield Barracks.
- f) The licensee shall reevaluate the surface water sampling program and provide a map clearly identifying the locations of surface water sampling locations at the Schofield Barracks. The number of sampling locations should be adequate to determine if depleted uranium is being transported out of the Radiation Control Area and be as close as practicable to the Radiation Control Area boundary.
- g) The licensee shall obtain sediment samples in streambeds located immediately downstream of the Schofield Barracks Radiation Control Area and as close as practicable to the Schofield Barracks Radiation Control Area boundary.
28. All written notices and reports to NRC required under this license shall be addressed to: ATTN: Document Control Desk, Deputy Director, Decommissioning and Uranium Recovery Licensing Directorate, Division of Waste Management and Environmental Protection, Office of Federal and State Materials and Environmental Management Programs, Mailstop T8 F5, U. S. Nuclear Regulatory Commission, Washington, DC 20555-0001, or by express delivery to 11545 Rockville Pike, Two White Flint North, Rockville, MD 20852-2738. Required telephone notifications shall be made to the NRC Operations Center at (301) 816-5100, unless otherwise specified in the license conditions.

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FOR THE NUCLEAR REGULATORY COMMISSION

Dated: _____

Keith I. McConnell, Deputy Director
Decommissioning and Uranium Recovery
Licensing Directorate
Division of Waste Management
and Environmental Protection
Office of Federal and State Materials
and Environmental Management Programs

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