

December 31, 2018

SECY-19-0001

FOR: The Commissioners

FROM: Marc L. Dapas, Director Office of Nuclear Material Safety and Safeguards

<u>SUBJECT</u>: JEFFERSON PROVING GROUND REQUEST FOR POSSESSION-ONLY LICENSE AMENDMENT AND EXEMPTION FROM DECOMMISSIONING TIMELINESS RULE

PURPOSE:

The purpose of this paper is to inform the Commission of the request from the U.S. Department of the Army (Army) to amend NRC Materials License SUB-1435 for the Jefferson Proving Ground (JPG) site in southeastern Indiana to a possession-only license. Granting the license amendment for the JPG site would also require an exemption from the decommissioning timeliness rule in Title 10 of the *Code of Federal Regulations* (10 CFR) 40.42, "Expiration and termination of licenses and decommissioning of sites and separate buildings or outdoor areas," which the Army has requested. The U.S. Nuclear Regulatory Commission (NRC) staff plans to publish for public comment a draft environmental assessment (EA) and finding of no significant impact (FONSI) for this proposed license amendment and exemption in the *Federal Register* (FR).

BACKGROUND:

The JPG site was established in 1940 for the purpose of testing all types of ammunition, projectiles, propellants, cartridge cases, primers, fuses, boosters, bombs, and grenades. From 1941-1995, over 24 million rounds of conventional explosive ammunition were fired. Periods of high activity occurred during World War II, the Vietnam War, and peaked in 1953 in support of the Korean War with the testing of 175,000 rounds per month.

CONTACT: Bob Nelson, NMSS/DUWP 301-415-0707 From 1984-1994, the Army test fired 100,000 kilograms (kg) (220,000 pounds [lbs.]) of tank penetrator rounds containing depleted uranium (DU) under NRC Materials License SUB-1435. The DU impact area is approximately 518 hectares (1280 acres) north of the firing line. After several operations to recover DU, the impact area still contains about 70,000 kg (154,000 lbs.) of DU and 1.5 million rounds of unexploded ordinance. Since 1984, the soil, groundwater, surface water, and sediment have been monitored for DU biannually. There has been no DU contamination detected in the groundwater monitoring wells. The JPG site is currently being maintained as a wildlife refuge managed by the U.S. Fish and Wildlife Service.

The staff previously considered a "possession-only" license approach in SECY-03-0031, "Jefferson Proving Ground Decommissioning Status," and informed the Commission of its intent to continue the possession-only license for the JPG site for renewable 5-year terms for an indefinite period. Subsequently, the Army withdrew its request for a renewable possession-only license in 2005 and instead requested an alternate schedule under 10 CFR 40.42(g)(2) to submit a revised decommissioning plan (DP) in 2011. The Army's justification for an alternate schedule was the additional site characterization needed to prepare a new DP that would include license termination under restricted conditions. Specifically, during this period, the Army planned to enhance its understanding of the nature and extent of contamination in the DU impact area and to define and verify its conceptual site model. In April 2006, the staff approved this alternate schedule request through the issuance of License Amendment No. 13 (Agencywide Documents Access and Management System [ADAMS] Package Accession Number [No.] ML053320014). In May 2012, the Army submitted another alternate schedule request to extend the time for submittal of the JPG DP for a 20-month period to continue the collection of data to provide satisfactory input parameters for off-site transport models. The staff approved this request through the issuance of License Amendment No. 17 (ADAMS Accession No. ML12272A252).

The NRC received a license amendment request (LAR) to terminate NRC Materials License SUB-1435 in accordance with 10 CFR 20.1403, "Criteria for license termination under restricted conditions," dated August 28, 2013. In conjunction with the LAR, the Army provided a DP and an environmental report (ADAMS Accession No. ML13247A549). The proposed action at that time was the termination of NRC Materials License SUB-1435 with institutional controls for the depleted uranium impact area. The Army's basis for requesting restricted release was the hazardous and prohibitively expensive cleanup of the commingled DU and unexploded ordnance.

The guidance in Volume 1, Revision 2 of NUREG-1757, "Consolidated Decommissioning Guidance: Decommissioning Process for Materials Licensees," (ADAMS Accession No. ML063000252) calls for the development of an environmental impact statement (EIS) for license termination under restricted conditions (see Table 15.3, page 15-17). Accordingly, on November 3, 2014, the staff published a *Federal Register* Notice (FRN) (79 FR 65256) (ADAMS Accession No. ML14267A436) announcing its intent to prepare an EIS to evaluate potential environmental impacts of the proposed license termination and to conduct a scoping process for the EIS. In July 2015, the staff issued the EIS Scoping Process Summary Report entitled, "Proposed Termination of NRC Materials License SUB-1435 for the Jefferson Proving Ground Depleted Uranium Impact Area in Jefferson County, Indiana" (ADAMS Accession No. ML15205A228).

Under 10 CFR 20.1403, the Army would have had to demonstrate that further reductions in residual radioactivity necessary to comply with the radiological criteria for unrestricted release would result in net public or environmental harm, or were not being made because the residual

radiation levels are as low as is reasonably achievable. The Army would have had to implement legally enforceable institutional controls such as deed restrictions to prevent future development of the land and provide reasonable assurance that the dose to the critical group would not exceed 25 millirem (0.25 millisievert) per year. The Army would have needed to provide financial assurance to enable the U.S. Fish and Wildlife Service or an independent third party to assume and carry out responsibilities for any necessary controls and maintenance of the site. Additionally, 10 CFR 20.1403 provides for participation and advice on these issues by representatives of community interests who may be affected by the decommissioning. If granted, the Army would have been the first licensee approved for restricted release.

Subsequently, on November 25, 2015, the Army submitted a letter to the NRC formally withdrawing its 2013 LAR to terminate NRC Materials License SUB-1435 under restricted release conditions (ADAMS Accession No. ML16005A100). Upon receipt of the Army's request to withdraw the 2013 LAR, the staff terminated the safety review for the LAR and actions related to the EIS. Subsequently, several meetings were held between the NRC and Army staff to discuss the requirements of obtaining a 10 CFR 40.14 specific exemption from the decommissioning timeliness rule in 10 CFR 40.42)(h)(1), which requires that unless an alternate schedule is approved, "licensees shall complete decommissioning of the site or separate building or outdoor area as soon as practicable but no later than 24 months following the initiation of decommissioning." On December 21, 2016, the Army submitted an LAR (ADAMS Accession No. ML17004A186) to change the authorized use of licensed material from "possession-only for decommissioning" to "possession-only" and obtain an exemption from the NRC's decommissioning timeliness rule. The Army indicated that a "possession-only" license was preferable to a license terminated under "restricted release," due to feedback from public stakeholders, who were concerned that the Army would no longer be obligated to monitor groundwater for DU intrusion under a restricted release.

DISCUSSION:

Under the current LAR submitted on December 21, 2016, the Army will retain control over the JPG site in accordance with the proposed possession-only license and will not pursue decommissioning at this time. If the staff were to grant the LAR and the requested exemption, a license condition would be added to the possession-only license to limit the exemption to a 20-year time period. Prior to the end of the 20-year time period, the Army must apply for a renewal of the exemption and determine if any technological developments will make decommissioning the site feasible at some future date. Under the possession-only approach, the Army will be required to maintain the license, site conditions, environmental monitoring, and security. The staff sent the Army a request for additional information on March 27, 2018 (ADAMS Accession No. ML17341B560). The Army responded to this request in a letter dated May 25, 2018 (ADAMS Accession No. ML18156A002). The staff plans to complete the Safety Evaluation Report by summer 2019.

The staff initiated the development of an EA for the proposed license amendment and exemption and determined that publication of the draft EA and FONSI for public comment pursuant to 10 CFR 51.33(b) was appropriate. The actions proposed at the site (e.g., monitoring and maintenance) are very similar to the actions proposed when the Army requested termination of the license under restricted conditions which, under applicable NRC guidance and practice, led to the preparation of an EIS. Since the Army withdrew its request for restricted release and is now pursuing a possession-only amendment, an EIS is no longer required and an EA is now appropriate. The Army's previous proposal for license termination generated a high level of interest from stakeholders who live near the site and participated in the public

scoping process. For example, as described in the Scoping Process Summary Report mentioned above, commenters raised questions about the regulatory status of the site and concerns about long-term oversight, the physical conditions at the site, and the potential for contaminant migration offsite and into groundwater.¹ The staff expects that allowing for and addressing public comments would further the purposes of the National Environmental Policy Act because it would result in an EA that better informs the staff's decision and fosters public confidence in the decision-making process. Following publication of this SECY paper, the staff expects to publish an FRN announcing the availability of the draft EA and FONSI for a 30-day public comment period.

CONCLUSION:

The staff is considering issuance of a license amendment for possession-only and an exemption from the decommissioning timeliness rule for the Army's JPG site. The staff plans to publish the FRN on the availability of the final EA and FONSI and then reach a decision on the license amendment and exemption by summer 2019. Due to the unique circumstances of this license amendment, this paper was developed for Commission awareness.

COORDINATION:

The Office of the General Counsel has reviewed this paper and has no legal objections.

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Marc L. Dapas, Director Office of Nuclear Material Safety and Safeguards

¹ Decommissioning and license termination efforts at JPG date back to 1999 when the Army submitted its first Decommissioning Plan. Public interest in these efforts was high. For a summary of the proceeding related to these early efforts, see *U.S. Army* (Jefferson Proving Ground Site), LBP-08-4, 67 NRC 105.106-113 (2008).

ADAMS Accession No. ML18177A053

ADAMS Accession No. ML18177A053						*via email
OFFICE	NMSS/DUWP	NMSS/DUWP	NMSS/DUWP	NMSS/FCSE	NMSS/DUWP	NMSS/DUWP
NAME	BNelson	CHolston	JSmith	CRoman	CMcKenney	SKoenick
DATE	7/10/18	7/12/18	7/10/18	7/12/18	7/18/18	9/1/18
OFFICE	OGC	NMSS/DUWP	NMSS	NMSS		
NAME	ASilva	JTappert	CGoode	MDapas	Ð	
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