

NUCLEAR REGULATORY COMMISSION

DOCKET NO. 040-06377

NOTICE OF AVAILABILITY OF ENVIRONMENTAL ASSESSMENT AND FINDING OF NO SIGNIFICANT IMPACT FOR LICENSE AMENDMENT TO SOURCE MATERIALS LICENSE NO. SUB-348, FOR THE UNRESTRICTED RELEASE OF THE DEPARTMENT OF THE ARMY, U.S. ARMY RESEARCH, DEVELOPMENT AND ENGINEERING COMMAND, ARMAMENT RESEARCH, DEVELOPMENT AND ENGINEERING CENTER, BUILDING 318 FACILITY IN PICATINNY, NEW JERSEY

AGENCY: Nuclear Regulatory Commission.

ACTION: Issuance of Environmental Assessment and Finding of No Significant Impact for License Amendment.

FOR FURTHER INFORMATION CONTACT: Betsy Ullrich, Commercial and R&D Branch, Division of Nuclear Materials Safety, Region I, 475 Allendale Road, King of Prussia, PA 19406; telephone (610) - 337- 5040; fax number (610) - 337- 5269; or by email: exu@nrc.gov.

SUPPLEMENTARY INFORMATION:

I. Introduction

The U.S. Nuclear Regulatory Commission (NRC) is considering the issuance of a license amendment to Source Materials License No. SUB-348. This license is held by the Department of the Army, U. S. Army Research, Development and Engineering Command (RDEC), Armament Research, Development and Engineering Center (ARDEC) (the Licensee), for its activities at the Picatinny Arsenal, located in Picatinny, New Jersey. Issuance of the amendment

would authorize release of Building 318 for unrestricted use. The Licensee requested this action in a letter dated March 26, 2007. The NRC has prepared an Environmental Assessment (EA) in support of this proposed action in accordance with the requirements of Title 10, Code of Federal Regulations (CFR), Part 51 (10 CFR Part 51). Based on the EA, the NRC has concluded that a Finding of No Significant Impact (FONSI) is appropriate with respect to the proposed action. The amendment will be issued to the Licensee following the publication of this FONSI and EA in the Federal Register.

II. Environmental Assessment

Identification of Proposed Action

The proposed action would approve the Licensee's March 26, 2007, license amendment request, resulting in release of Building 318 for unrestricted use. License No. SUB-348 was issued on July 13, 1961, pursuant to 10 CFR Part 40, and has been amended periodically since that time. This license authorized the Licensee to use uranium and thorium in any form for purposes of conducting research and development activities.

The Picatinny Arsenal is situated on 6,500 acres, and consists of residential, industrial, office space, laboratories, and specialized facilities. The Picatinny Arsenal is located in a mixed residential and commercial area. Building 318 was one of several buildings where use of licensed materials was performed under the authority of RDEC/ARDEC, one of the military tenants at Picatinny Arsenal. Building 318 is a single-story, brick, high-bay structure covering approximately 3,900 square-feet in area, of which an office occupies about 90 square-feet. The remaining area was used for storage of equipment that was contaminated with depleted uranium.

In the summer of 2002, the Licensee ceased licensed activities within Building 318 and initiated a survey and decontamination of Building 318. Based on the Licensee's historical knowledge of the site and the conditions of Building 318, the Licensee determined that only routine decontamination activities, in accordance with their NRC-approved, operating radiation safety procedures, were required. The Licensee was not required to submit a decommissioning plan to the NRC because worker cleanup activities and procedures are consistent with those approved for routine operations. The Licensee conducted surveys of Building 318 in August 2002 and initially requested approval for its unrestricted release in a letter dated October 8, 2002. However, NRC staff noted in a letter dated December 18, 2002, that the Licensee used outdated release criteria and did not approve release of Building 318 at that time. In March, 2007, the Licensee provided information to the NRC to demonstrate that it meets the criteria in Subpart E of 10 CFR Part 20 for unrestricted release, based on the development of a site-specific criteria.

Need for the Proposed Action

The Licensee has ceased conducting licensed activities in Building 318, and seeks the unrestricted use of Building 318.

Environmental Impacts of the Proposed Action

The historical review of licensed activities conducted in Building 318 shows that such activities involved use only of depleted uranium, a radionuclide with a half-life greater than 120 days. Prior to performing the final status survey, the Licensee conducted decontamination activities, as necessary, in the areas of Building 318 affected by this radionuclide.

The Licensee conducted a final status survey on August 10-11, 2002, of Building 318. The final status survey report was attached to the Licensee's amendment request dated March 26, 2007. The Licensee elected to demonstrate compliance with the radiological criteria for unrestricted release as specified in 10 CFR 20.1402 by developing a derived concentration guideline level (DCGL) for Building 318. The Licensee conducted site-specific dose modeling using input parameters specific to Building 318 and assumed the light industrial building could be converted to a military residence. The Licensee used RESRAD-BUILD, Version 3.22, using all default parameters except: the removable fraction of surface contamination was set to 0.1; the source type selected was "area source;" and doses were evaluated at times of 0, 1, 2, 5, 10, 100, and 1,000 years. The Licensee thus determined the maximum amount of residual radioactivity on building surfaces that will satisfy the NRC requirements in Subpart E of 10 CFR Part 20 for unrestricted release would be 2,413 disintegrations per minute (dpm) per 100-square-centimeters area (100 cm²). The NRC reviewed the Licensee's methodology and proposed DCGL when they were submitted with the March 26, 2007, request for release of Building 318 for unrestricted use. The NRC staff finds the licensee's proposed DCGL of 2,413 dpm/100 cm² to be acceptable. The Licensee's final status survey results were below this DCGL, and are thus acceptable.

Based on its review, the staff has determined that the affected environment and any environmental impacts associated with the proposed action are bounded by the impacts evaluated by the "Generic Environmental Impact Statement in Support of Rulemaking on Radiological Criteria for License Termination of NRC-Licensed Nuclear Facilities" (NUREG-1496) Volumes 1-3 (ML042310492, ML042320379, and ML042330385). The staff finds there were no significant environmental impacts from the use of radioactive material in Building 318. The NRC staff reviewed the docket file records and the final status survey report to identify any non-radiological hazards that may have impacted the environment surrounding

Building 318. No such hazards or impacts to the environment were identified. The NRC has identified no other radiological or non-radiological activities in the area that could result in cumulative environmental impacts.

The NRC staff finds that the proposed release of Building 318 for unrestricted use is in compliance with 10 CFR 20.1402. Although the Licensee will continue to perform licensed activities at other parts of the Picatinny Arsenal, the Licensee must ensure that this decommissioned area does not become recontaminated. Before the license can be terminated, the Licensee will be required to show that the entire facility, including previously-released areas, complies with the radiological criteria in 10 CFR 20.1402. Based on its review, the staff considered the impact of the residual radioactivity in Building 318 and concluded that the proposed action will not have a significant effect on the quality of the human environment.

Environmental Impacts of the Alternatives to the Proposed Action

Due to the largely administrative nature of the proposed action, its environmental impacts are small. Therefore, the only alternative the staff considered is the no-action alternative, under which the staff would leave things as they are by simply denying the amendment request. This no-action alternative is not feasible because it conflicts with 10 CFR 40.42(d), requiring that decommissioning of source material facilities be completed and approved by the NRC after licensed activities cease. The NRC's analysis of the Licensee's final status survey data confirmed that Building 318 meets the requirements of 10 CFR 20.1402 for unrestricted release. Additionally, denying the amendment request would result in no change in current environmental impacts. The environmental impacts of the proposed action and the no-action alternative are therefore similar, and the no-action alternative is accordingly not further considered.

Conclusion

The NRC staff has concluded that the proposed action is consistent with the NRC's unrestricted release criteria specified in 10 CFR 20.1402. Because the proposed action will not significantly impact the quality of the human environment, the NRC staff concludes that the proposed action is the preferred alternative.

Agencies and Persons Consulted

NRC provided a draft of this Environmental Assessment to the State of New Jersey Department of Environmental Protection (NJDEP) for review on August 29, 2007. On September 4, 2007, NJDEP responded by letter. The State agreed with the conclusions of the EA.

The NRC staff has determined that the proposed action is of a procedural nature, and will not affect listed species or critical habitat. Therefore, no further consultation is required under Section 7 of the Endangered Species Act. The NRC staff has also determined that the proposed action is not the type of activity that has the potential to cause effects on historic properties. Therefore, no further consultation is required under Section 106 of the National Historic Preservation Act.

III. Finding of No Significant Impact

The NRC staff has prepared this EA in support of the proposed action. On the basis of this EA, the NRC finds that there are no significant environmental impacts from the proposed action, and that preparation of an environmental impact statement is not warranted. Accordingly, the NRC has determined that a Finding of No Significant Impact is appropriate.

IV. Further Information

Documents related to this action, including the application for license amendment and supporting documentation, are available electronically at the NRC's Electronic Reading Room at <http://www.nrc.gov/reading-rm/adams.html>. From this site, you can access the NRC's Agencywide Document Access and Management System (ADAMS), which provides text and image files of NRC's public documents. The documents related to this action are listed below, along with their ADAMS accession numbers.

[1.] Letter dated March 26, 2007 with "Derivation of a Site Specific DCGL for the Remediation of TACOM-ARDEC Picatinny Arsenal Building 318 and Evaluation of Final Survey Results, October 2004" (ML070940607)

[2]. NUREG-1757, "Consolidated NMSS Decommissioning Guidance;"

[3]. Title 10 Code of Federal Regulations, Part 20, Subpart E, "Radiological Criteria for License Termination;"

[4]. Title 10, Code of Federal Regulations, Part 51, "Environmental Protection Regulations for Domestic Licensing and Related Regulatory Functions;"

[5]. NUREG-1496, "Generic Environmental Impact Statement in Support of Rulemaking on Radiological Criteria for License Termination of NRC-Licensed Nuclear Facilities."

If you do not have access to ADAMS, or if there are problems in accessing the documents located in ADAMS, contact the NRC Public Document Room (PDR) Reference staff at 1-800-397-4209, 301-415-4737, or by email to pdr@nrc.gov. These documents may also be viewed electronically on the public computers located at the NRC's PDR, O 1 F21, One White Flint North, 11555 Rockville Pike, Rockville, MD 20852. The PDR reproduction contractor will copy documents for a fee.

Dated at King of Prussia, Pennsylvania this 2nd day of October 2007.

FOR THE NUCLEAR REGULATORY COMMISSION

/RA/

James P. Dwyer, Chief
Commercial and R&D Branch
Division of Nuclear Materials Safety
Region I