

NUCLEAR REGULATORY COMMISSION  
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Environmental Assessment Related to Issuance of a License Amendment  
of U.S. Nuclear Regulatory Commission Materials License No. STB-1554,  
Department of the Army - Watervliet Arsenal in Watervliet, New York

## **Introduction**

The U.S. Nuclear Regulatory Commission (NRC) has prepared this environmental assessment (EA) of the amendment of Department of the Army's Materials License Number STB-1554, and the release of Building 120 located at its Watervliet, New York site for unrestricted use. Building 120 is operated by the Department of the Army in Watervliet, New York. The Department of the Army was authorized by NRC from 1972 to 2004 to use thorium-232 for research and development purposes in Building 120 at the site. In 2003, the Department of the Army requested that NRC release Building 120 for unrestricted use. The Department of the Army has conducted surveys of the facility and determined that the facility meets the license termination criteria in Subpart E of 10 CFR Part 20. The NRC staff has evaluated the Department of the Army's request and the results of the surveys, and has developed an EA in accordance with the requirements of 10 CFR Part 51. Based on the staff evaluation, the conclusion of the EA is a Finding of No Significant Impact (FONSI) on human health and the environment for the proposed licensing action.

The Department of the Army requested release for unrestricted use of Building 120 at 1 Buffington Street, Watervliet, New York, as authorized by the NRC License No. STB-1554. Only one laboratory in Building 120, Room 255, was authorized to perform research and development with thorium-232. Room 255 is 6 meters by 9 meters in size (approximately 600 square feet). The remainder of the building was general office and laboratory space located in a mixed residential/commercial area.

License No. STB-1554 was issued in 1993, replacing License No. STB-1121 first issued in 1972, and amended periodically since that time. NRC-licensed activities authorized in Building 120 at the Watervliet, New York site were limited to use of thorium-232 in Room 255 for laboratory procedures typically performed on bench tops and in a hood. No outdoor areas were affected by this use of thorium-232.

## **The Proposed Action**

The proposed action is to amend Materials License No. STB-1554 and release Building 120 located at 1 Buffington Street, Watervliet, New York for unrestricted use. By letter dated March 7, 2005, the Department of the Army stated that no further actions are required to remediate the facility, and requested release of the facility for unrestricted use. The Department of the Army stated that, based on records and interviews, licensed activities involving use of thorium-232 most likely never took place. However, because only limited historical records were available regarding use of thorium-232, in July 2003 when the licensee first requested that NRC remove thorium-232 from the license as an authorized material, the NRC determined that surveys should be performed to verify that the facility could be released for unrestricted use. Based on the licensee's historical knowledge of the site and the conditions of the facility, the

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licensee determined that only routine decontamination activities, in accordance with licensee radiation safety procedures, were required. A decommissioning plan was not required to be submitted to the NRC. The licensee surveyed the facility, decontaminated or remediated areas as needed, and provided documentation that the facility meets the license termination criteria specified in Subpart E of 10 CFR Part 20, and does not require additional decommissioning activities to be performed. The licensee demonstrated this using the screening criteria described in 65 FR 37186.

### **Need for the Proposed Action**

The purpose of the proposed action is to amend NRC Materials License No. STB-1554, to allow for the release of Building 120 located at 1 Buffington Street, Watervliet, New York, for unrestricted use. The licensee needs this license change because it no longer plans to conduct licensed activities with thorium-232 at this facility. NRC is fulfilling its responsibilities under the Atomic Energy Act to make a timely decision on a proposed license amendment for release of facilities for unrestricted use that ensures protection of public health and safety and the environment. The licensee has requested the action to reduce their regulatory burden since they no longer intend to conduct licensed activities using thorium-232 at this location.

### **Environmental Impacts of the Proposed Action**

The affected environment was described in the Introduction. The licensee has completed all remediation at the site. The NRC staff has reviewed the surveys performed by the Department of the Army to demonstrate compliance with the 10 CFR 20.1402 license termination criteria. Based on its review, the staff has determined that the affected environment and environmental impacts associated with the release for unrestricted use of the Department of the Army facilities 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). The staff also finds that the proposed release for unrestricted use of the Department of the Army facilities is in compliance with Title 10, Code of Federal Regulations, Part 20.1402, "Radiological Criteria for Unrestricted Use." The NRC has found no other activities in the area that could result in cumulative impacts.

### **Environmental Impacts of the Alternatives to the Proposed Action**

Since Building 120 at the Watervliet, New York, site has already been surveyed and found acceptable for release for unrestricted use, the only alternative to the proposed action of amendment of the license and release of Building 120 at the Watervliet, New York site for unrestricted use is denial of the proposed action (i.e. no action). Denial of the application would result in no change in current environmental impacts. The environmental impacts of the proposed action and the alternative action are similar.

### **Agencies and Persons Consulted**

The NRC staff has determined that the proposed action will not affect listed species or critical habitat. Therefore, no further consultation is required under Section 7 of the Endangered Species Act. Likewise, the NRC staff have 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.

NRC provided a draft of its Environmental Assessment to the State of New York for review. On September 7, 2005, the State of New York responded by electronic mail and agreed with the conclusions of the EA.

### **Conclusions**

Based on its review, the NRC staff has concluded that the completed action complies with 10 CFR Part 20. The NRC staff have prepared this EA in support of the proposed action to amend License No. STB-1554. On the basis of the EA, NRC has concluded that there are no significant environmental impacts and the license amendment does not warrant the preparation of an Environmental Impact Statement. Accordingly, it has been determined that a Finding of No Significant Impact is appropriate.

### **List of Preparers**

Betsy Ullrich, Senior Health Physicist, Division of Nuclear Materials Safety, Region I

### **List of References**

1. NRC License No. STB-1554 inspection and licensing records.
2. Final Survey Report for Room 255, Building 120, Watervliet Arsenal, dated March 2005 [ADAMS Accession No. ML051080464].
3. Federal Register Notice, Volume 65, No. 114, page 37186, dated Tuesday, June 13, 2000, "Use of Screening Values to Demonstrate Compliance With The Federal Rule on Radiological Criteria for License Termination."
4. Title 10, Code of Federal Regulations, Part 20, Subpart E, "Radiological Criteria for License Termination."
5. Title 10, Code of Federal Regulations, Part 51, "Environmental Protection Regulations for Domestic Licensing and Related Regulatory Functions."
6. NUREG-1496, "Generic Environmental Impact Statement in Support of Rulemaking on Radiological Criteria for License Termination of NRC-Licensed Nuclear Facilities."

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The application for the license amendment and supporting documentation are available for inspection at NRC's Public Electronic Reading Room at <http://www.nrc.gov/reading-rm/adams.html>. Any questions with respect to this action should be referred to Betsy Ullrich, Commercial and R&D Branch, Division of Nuclear Materials Safety, Region I, 475 Allendale Road, King of Prussia, Pennsylvania 19406, telephone (610) 337-5040, fax (610) 337-5269.

Dated at King of Prussia, Pennsylvania this 25th day of November 2005

FOR THE NUCLEAR REGULATORY COMMISSION

**/RA/**

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

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