

NUCLEAR REGULATORY COMMISSION

[NRC-2009-0539]

DOCKET NO. 040-00341

**NOTICE OF AVAILABILITY OF ENVIRONMENTAL ASSESSMENT AND FINDING OF NO
SIGNIFICANT IMPACT FOR LICENSE AMENDMENT TO SOURCE MATERIALS LICENSE
NO. STC-133, FOR UNRESTRICTED RELEASE OF THE DEFENSE LOGISTICS AGENCY,
DEFENSE NATIONAL STOCKPILE CENTER, HAMMOND DEPOT FACILITY IN HAMMOND,
INDIANA**

AGENCY: Nuclear Regulatory Commission.

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

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SUPPLEMENTARY INFORMATION:

I. Introduction

The U.S. Nuclear Regulatory Commission (NRC) is considering the issuance of a license amendment to Source Materials License No. STC-133. This license is held by the Defense Logistics Agency, Defense National Stockpile Center (DLA/DNSC) (the Licensee), for its Hammond Depot (the Facility), located at 3200 Sheffield Avenue in Hammond, Indiana. Issuance of the amendment would authorize release of the Facility for unrestricted use. The Licensee

requested this action in a letter dated February 3, 2006. 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 February 3, 2006, license amendment request, resulting in release of the Facility for unrestricted use. License No. STC-133 as issued on February 14, 1957, pursuant to 10 CFR Part 40, and has been amended periodically since that time. This license authorized the Licensee to use natural uranium and thorium in the form of ores, concentrations and solids for the purpose of storage, sampling, repackaging and transfer for the activities of the Defense National Stockpile.

The Hammond Depot was originally sited on approximately 130 acres. During the 1970's, a large portion of the site was sold, including Warehouse 2 in which thorium nitrate had been stored. Warehouse 2 was remediated and released for unrestricted use prior to that sale. Because Warehouse 2 is separated from the current facilities, and because it was released for unrestricted use in the 1970's, Warehouse 2 is not part of this assessment. The current Facility is situated on 67 acres located in an industrial/commercial area, and consists of warehouse and outdoor storage areas. Within the Facility, use of licensed materials was confined to Buildings 100W, 100E, and 200E. These warehouse buildings each contain approximately 4,640 square meters (m²) of storage space, although licensed materials were stored only in portions of each warehouse. Some soil contamination was identified in the former Burn Cage area (1,050 m²) and

Ferrochrome Pile #6 (2,800 m²), as well as five smaller areas elsewhere on the site (10 m², 250 m², 10 m², 2 m² and 2 m²), which may have resulted from transfer activities or from radioactive materials that were not required to be licensed by the Commission.

In 2005, the Licensee ceased licensed activities and initiated a survey and decontamination of the Facility. The Licensee conducted surveys of the Facility and provided information to the NRC to demonstrate that it meets the criteria in Subpart E of 10 CFR Part 20 for unrestricted release.

Need for the Proposed Action

The Licensee has ceased conducting licensed activities at the Facility, and seeks its unrestricted use.

Environmental Impacts of the Proposed Action

The historical review of licensed activities conducted at the Facility shows that such activities involved use of the following radionuclides with half-lives greater than 120 days: natural uranium and/or thorium in the forms of monazite sand, thorium nitrate, sodium sulfate, tantalum pentoxide, and columbium tantalum minerals, contained in fiber or steel drums. Prior to performing the final status survey, the Licensee conducted decontamination activities, as necessary, in the areas of the Facility affected by these radionuclides.

The Licensee conducted a final status survey during 2006 and 2007. This survey covered the three warehouses (Buildings 100W, 100E, and 200E) where licensed materials were stored as well as 7 outdoor areas (the Burn Cage area, the Ferrochrome Pile #6 area, and five additional small areas) where contaminated soil was identified. The final status survey report was attached to the Licensee's letter dated April 21, 2008. The Licensee elected to demonstrate

compliance with the radiological criteria for unrestricted release as specified in 10 CFR 20.1402 by developing derived concentration guideline levels (DCGLs) for its Facility.

The Licensee conducted site-specific dose modeling using input parameters specific to the Facility that adequately bounded the potential dose. This included dose modeling for two scenarios: building surfaces and soil. The building surfaces dose model was based on the warehouse worker scenario. The soil dose model was based on a resident farmer scenario. The Licensee thus determined the maximum amount of residual radioactivity on building surfaces, equipment, materials and soils that will satisfy the NRC requirements in Subpart E of 10 CFR Part 20 for unrestricted release. The NRC previously reviewed the Licensee's methodology and proposed DCGLs, and concluded that the proposed DCGLs are acceptable for use as release criteria at the Facility. The NRC's approval of the Licensee's proposed DCGLs was published in the *Federal Register* on November 30, 2007 (72 FR 67761). The Licensee's final status survey results are below these DCGLs, and are thus acceptable.

The NRC staff conducted a confirmatory survey during 2007. None of the confirmatory sample results exceeded the DCGLs established for the Facility. 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 at the Facility. 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 the Facility. 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 the Facility for unrestricted use is in compliance with 10 CFR 20.1402. Based on its review, the staff considered the impact of the residual radioactivity at the Facility 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 the requirement in 10 CFR 40.42(d), 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 the Facility 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 EA to the Indiana State Department of Health, Indoor Air & Radiological Health Division for review on October 21, 2009. On November 2, 2009, the Indiana State Department of Health, Indoor Air & Radiological Health Division responded by electronic mail. The State agreed with the conclusions of the EA, and otherwise had no comments.

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 Documents 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, where available.

1. Letter dated February 3, 2006 (ML060580094) with attachments “Historical Site Assessment...,” August 2005 (ML060580605); “Radiological Scoping Survey...,” December 2005 (ML060580608); “Preliminary Site-Specific Derived Concentration Guideline Levels...,” January 2006 (ML060580629); and “Environmental Assessment, Disposition of Thorium Nitrate” October 2003 (ML060580592);
2. Letters dated July 5, 2006 (ML061870578), July 19, 2006 (ML062070231), September 19, 2006 (ML062710160) and September 29, 2006 (ML062760618);
3. Letter dated September 29, 2006, with the Decommissioning Plan dated September 2006 (ML062710179);
4. Letter dated January 12, 2007 (ML070160372);
5. Letter dated July 19, 2007 with the Final Status Survey Plan dated July 2007 (ML072010230);
6. Test America Lab Sample Survey Results received January 24, 2008 (ML080240408);
7. Letter dated April 21, 2008 [ML081200814] with the Final Status Survey Report dated April 2008 (ML081210688);
8. NUREG-1757, “Consolidated NMSS Decommissioning Guidance;”
9. Title 10, Code of Federal Regulations, Part 20, Subpart E, “Radiological Criteria for License Termination;”
10. Title 10, Code of Federal Regulations, Part 51, “Environmental Protection Regulations for Domestic Licensing and Related Regulatory Functions;” and
11. 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 pdresource@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 Region I, 475 Allendale Road, King of Prussia, this 30th day of November, 2009.

FOR THE NUCLEAR REGULATORY COMMISSION

/RA/

James Dwyer, Chief
Commercial and R&D Branch
Division of Nuclear Materials Safety
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