

NUCLEAR REGULATORY COMMISSION

[NRC-2009-0272]

DOCKET NO. 03003754

**NOTICE OF AVAILABILITY OF ENVIRONMENTAL ASSESSMENT AND FINDING OF NO
SIGNIFICANT IMPACT FOR LICENSE AMENDMENT TO MATERIALS LICENSE NO.
06-00217-06, FOR REMEDIATION OF PORTIONS OF A SITE IN WINDSOR, CONNECTICUT**

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 Materials License No. 06-00217-06 issued to ABB Inc. (ABB or the Licensee). ABB submitted the amendment request by letter dated December 31, 2008. The proposed action would authorize ABB to conduct remediation in place of the U.S. Army Corps of Engineers (USACE), at portions of the ABB site designated as Formally Utilized Sites Remedial Action Program (FUSRAP) areas. The ABB site, a 612-acre parcel located at 2000 Day Hill Road, in Windsor, Connecticut (the Facility), is currently undergoing site-wide decommissioning.

The Facility's FUSRAP areas will be cleaned up by the Licensee with NRC oversight, in accordance with an agreement between the NRC and USACE dated August 15, 2007. Under this agreement, USACE will suspend its FUSRAP activities at the Facility after the Licensee modifies its previously-approved site decommissioning plan (DP) by bringing within its scope cleanup of the FUSRAP areas. To accomplish this, the Licensee submitted a revised DP for NRC review and approval as part of its December 31, 2008, application.

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 December 31, 2008, license amendment request. The scope of the DP (initially approved on June 1, 2004) will be expanded to authorize ABB to conduct remediation activities for select FUSRAP areas at its Facility.

Changes in the revised DP were generally limited to an update to reflect the successful remediation of the non-FUSRAP Facility areas, and a description of the remaining Facility areas to be remediated. However, the revised DP does include new derived concentration guideline levels (DCGLs) for uranium and cobalt-60, to be used for one structure: the south portion of Building 3, that will remain in place following completion of the remediation activities. Areas to be remediated under the revised DP include all FUSRAP areas except the Debris Pile area and Site Brook area. These areas are located in wetlands and will be the subject of a future DP

amendment. The specific FUSRAP areas to be remediated included the removal of part of the five acre Building 3 Complex; removal of the one acre Building 6 Complex; removal of the industrial, waste, and sanitary lines associated with the Building Complexes; excavation of the seven acre Woods Area; and excavation of the one acre Drum Burial Pit area. Additionally, the revised DP provided for the Licensee's remediation of a two acre area termed the Burning Grounds which is contaminated with small quantities of radium-226 and thorium-232. This area was previously remediated to existing NRC standards and approved for unrestricted use by the NRC on August 10, 1989.

Need for the Proposed Action

The proposed action would allow ABB to complete the remaining Facility remediation and decommissioning activities, thereby reducing residual radioactivity at the Facility to a level that permits release of the entire property for unrestricted use and termination of the license. The Licensee has been successfully remediating and decommissioning the Facility since 2004 under the previously-approved DP. In order to complete remediation of the entire Facility, the FUSRAP areas must be remediated. NRC is fulfilling its responsibilities under the Atomic Energy Act to make a decision on a proposed license amendment for decommissioning that ensures safety and protection of the public and the environment.

Environmental Impacts of the Proposed Action

In preparing this EA, the NRC staff reviewed the 2004 EA issued in connection with the initial DP; the Licensee's Environmental Report submitted on February 28, 2008; and the revised DP submitted on December 31, 2008. Additionally, the staff reviewed the performance of the decommissioning activities completed by the Licensee to date. The staff concluded that the bases for the findings of the 2004 EA remain valid, and are applicable to the revised DP.

Regarding remediation of the FUSRAP areas, decommissioning methodologies are unchanged from the initial approved DP and are appropriate for the contaminant concentrations found in the FUSRAP area structures and soils. The same isotopes that were present in the Facility's non-FUSRAP areas (namely, those associated with enriched uranium and cobalt-60) exist in the FUSRAP areas as well. The FUSRAP buildings and areas requiring remediation are similar to those already successfully remediated and decommissioned at the Facility. The amount of waste in FUSRAP areas which will need to be packaged and shipped to a licensed disposal facility is similar to the amounts evaluated in the 2004 EA, and this waste will be packaged and transported to the same disposal facility previously used for non-FUSRAP area remediation activities.

As stated above, the revised DP includes a new site specific building DCGL, to support the unrestricted release of the southern portion, or High Bay, of Building 3. The staff's technical review confirmed that the licensee's requested site specific total uranium and cobalt-60 building DCGLs of 20,148, and 6,980 disintegrations per 100 square centimeters, respectively, would result in a maximum annual dose of less than 19 millirem of total effective dose equivalent to an average member of a critical group occupying the remaining structure. Since this dose is less than 25 millirem per year, use of these DCGLs will meet the radiological criteria for unrestricted release specified in 10 CFR 20.1402. The conclusions of the 2004 EA thus remain valid here for the proposed action.

The revised decommissioning plan included additional remediation for the Burning Grounds which was previously cleaned up to NRC standards and approved for unrestricted use in 1989. The licensee is performing this additional remediation because the existing contaminants remaining in this area are slightly above decommissioning screening values presently being used by the NRC staff. The staff reviewed the licensee's proposal to use post-remediation soil DCGLs of 1.1 and 0.6 picocuries per gram of soil for the isotopes of thorium-

232 and radium-226, respectively, which are the screening values listed in Table B.2 of NUREG 1757, "Consolidated NMSS Decommissioning Guidance," Volume 1, Revision 2. These values correspond to surface soil concentrations that the NRC staff has deemed are in compliance with the unrestricted release requirements of 10 CFR 20.1402, and are thus consistent with the 2004 EA findings.

In summary, NRC staff has reviewed the revised decommissioning plan for the Facility, and examined the impact of the proposed additional decommissioning activities. Based upon its review, the staff has determined that environmental impacts associated with the proposed action are no greater than the impacts found in the 2004 EA, and are bounded by the impacts discussed in NUREG 1496, "Generic Environmental Impact Statement in Support of Rulemaking on Radiological Criteria for License Termination of NRC-Licensed Nuclear Facilities," Volumes 1-3. The staff finds there have been no significant environmental impacts to date from the use and cleanup of radioactive material at the Facility. The NRC staff reviewed the docket file records to identify any non-radiological hazards that may impact 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 staff has considered the impact of the proposed FUSRAP area remediation at the Facility, and finds that the proposed action will not have a significant impact on the quality of the human environment.

Environmental Impacts of the Alternatives to the Proposed Action

The Facility is in the process of being decommissioned under an approved DP, and the NRC has agreed to allow ABB to conduct the remediation of the FUSRAP areas as part of a formal agreement with the USACE. Therefore, the only alternative to the proposed action to

continue the decommissioning process at the Facility is no action. The no-action alternative is not acceptable because it is inconsistent with NRC's Timeliness Rule (10 CFR 30.36), which requires licensees to decommission their facilities when licensed activities cease and to request termination of their radioactive materials license. Although termination of the NRC and USACE agreement would result in unnecessary remediation and decommissioning delay, the environmental impacts created by the action would be unchanged. 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 reviewed the environmental impacts of the proposed action in accordance with the requirements of 10 CFR 51 and NRC's unrestricted release criteria specified in 10 CFR 20.1402. The NRC staff has determined that incorporating the Facility's FUSRAP areas into the site-wide DP would not significantly affect the quality of the human environment. Therefore, an environmental impact statement is not warranted for the proposed action, and pursuant to 10 CFR 51.32, a FONSI is appropriate.

Agencies and Persons Consulted

This EA was prepared by NRC staff and coordinated with the following agencies: Connecticut Department of Environmental Protection and the U.S. Fish and Wildlife Services. NRC provided a draft of this EA to the Connecticut Department of Environmental Protection for review on May 20, 2009. On June 19, 2009, Michael Firsick of the Connecticut Department of Environmental Protection responded by email. The State agreed with the conclusions of the EA, however, they included a letter dated June 19, 2009, indicating that ABB had not submitted the

requested surveys to indicate the presence of two state species of special concern occurring in the project vicinity: Eastern box turtle (*Terrapene carolina*) and Eastern hognose snake (*Heterodon platirhinos*). On June 24, 2009, Mr. Firsick reported by email that the issues identified in the June 19, 2009, letter had been appropriately resolved with ABB.

III. Finding of No Significant Impact

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 FONSI 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.

1. NUREG-1757, "Consolidated NMSS Decommissioning Guidance;"
2. Title 10 *Code of Federal Regulations*, Part 20, Subpart E, "Radiological Criteria for License Termination;"
3. Title 10, *Code of Federal Regulations*, Part 51, "Environmental Protection Regulations for Domestic Licensing and Related Regulatory Functions;"
4. NUREG-1496, "Generic Environmental Impact Statement in Support of Rulemaking on Radiological Criteria for License Termination of NRC-Licensed Nuclear Facilities" (ML042310492, ML042320379, and ML042330385);

5. NRC letter and safety evaluation report to Combustion Engineering, Inc. authorizing unrestricted release of the woods area (Burning Grounds) dated August 10, 1989 (ML091400662);
6. ABB letter to NRC dated October 15, 2003, "Application for Amendment of Materials License 06-00217-06" dated October 15, 2003(ML033080245, ML033080248, and ML033080252);
7. Enclosure II to ABB letter dated October 15, 2003 "CE Windsor Site Decommissioning Plan, October 15, 2003" (ML033080254, ML033080258, ML033080273, ML033080279, ML033080310, and ML033080313);
8. Enclosure III to ABB letter dated October 15, 2003 "CE Windsor Site Derivation of Site-Specific DCGLs, September 2003" (ML033080318, ML033080320, ML033080327, ML033080334, ML033080341, ML033080346, ML033080352, ML033080356, and ML033080366);
9. "Environmental Assessment of the Proposed Decommissioning Plan for the ABB Prospects, Inc. Windsor, Connecticut Facility" dated May 20, 2004 (ML041400413);
10. NRC letter to the USACE dated August 15, 2007, "Proposed Process to Decommission and Cleanup the ABB Windsor Site" (ML072210979);
11. ABB letter to NRC dated February 28, 2008, "Subject: Environmental Information Report" (ML080850764, ML080850789);
12. ABB letter to the NRC dated December 31, 2008, "Application for Amendment of Materials License 06-00217-06" (ML090160123, ML090160128, ML090160370, and ML090160378);
13. Attachment 4 to ABB letter dated December 31, 2008, "CE Windsor Site Decommissioning Plan, Revision 1, December 2008" (ML090160381, ML090160388, and ML090160396);

14. Attachment 5 to ABB letter dated December 31, 2008. "CE Windsor Site Development of Building DCGLs, Revision 0, December 2008" (ML090160458, ML090160469, ML090160478, and ML090160487); and

15. State of Connecticut Department of Environmental Protection e-mail regarding actions to be taken for two state species of special concern occurring in the CE Windsor Site vicinity dated June 19, 2009 (ML091730286).

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 Region I, 475 Allendale Road, King of Prussia, PA, this 25th day of June 2009.

FOR THE NUCLEAR REGULATORY COMMISSION

/RA/

Judith Joustra, Chief
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