

NUCLEAR REGULATORY COMMISSION

[Docket No. 70-0036; NRC-2009-0278]

Exemption of Material for Proposed Disposal Procedures for the Westinghouse Electric Company, LLC, Hematite Decommissioning Project, License No. SNM-33, Festus, Missouri

AGENCY: Nuclear Regulatory Commission.

ACTION: Environmental assessment and finding of no significant impact; availability.

ADDRESSES: Please refer to Docket ID **NRC-2009-0278** when contacting the NRC about the availability of information regarding this document. You may access information related to this document, which the NRC possesses and are publicly-available, using any of the following methods:

- **Federal Rulemaking Web site:** Go to <http://www.regulations.gov> and search for Docket ID **NRC-2009-0278**. Address questions about NRC dockets to Carol Gallagher; telephone: 301-492-3668; e-mail: Carol.Gallagher@nrc.gov.

- **NRC's Agencywide Documents Access and Management System (ADAMS):**
You may access publicly-available documents online in the NRC Library at <http://www.nrc.gov/reading-rm/adams.html>. To begin the search, select "[ADAMS Public Documents](#)" and then select "[Begin Web-based ADAMS Search](#)." For problems with ADAMS, please contact the NRC's Public Document Room (PDR) reference staff at 1-800-397-4209, 301-415-4737, or by e-mail to pdr.resource@nrc.gov. The ADAMS accession number for each document referenced in this notice (if that document is available in ADAMS) is provided the first time that a document is referenced. In addition, for the convenience of the reader, the ADAMS accession numbers are provided in Section IV of this notice entitled, Further Information.

- **NRC's PDR:** You may examine and purchase copies of public documents at the NRC's PDR, Room O1-F21, One White Flint North, 11555 Rockville Pike, Rockville, Maryland 20852.

FOR FURTHER INFORMATION CONTACT: John J. Hayes, Senior Project Manager, Office of Federal and State Materials and Environmental Management Programs, U.S. Nuclear Regulatory Commission, Washington, DC 20555, telephone: 301-415-5928; e-mail: John.Hayes@nrc.gov.

SUPPLEMENTARY INFORMATION:

I. Introduction

By letter dated January 16, 2012, the U.S. Nuclear Regulatory Commission (NRC) received a license amendment application from Westinghouse Electric Company LLC (WEC or the licensee), pertaining to its planned disposal of NRC-licensed source, byproduct, and special nuclear materials. Regarding this material, WEC seeks approval, pursuant to section 20.2002 of Title 10 of the *Code of Federal Regulations* (10 CFR), of proposed disposal procedures which are not otherwise authorized by NRC regulations. WEC holds NRC License No. SNM-33, which authorizes the licensee to conduct decommissioning activities at its former fuel cycle facility located in Festus, Missouri. Since the fuel cycle facility operations have ceased, the Hematite site is undergoing decommissioning. The facility is now referred to as the Hematite Decommissioning Project (HDP). The amendment request seeks authorization allowing WEC to transfer decommissioning waste to U.S. Ecology Idaho, Inc. (USEI), a Resource Conservation and Recovery Act Subtitle C disposal facility located near Grand View, Idaho. This facility is regulated by the Idaho Department of Environmental Quality, and is not an NRC-licensed facility. Pursuant to 10 CFR 30.11 and 10 CFR 70.17, WEC's application also requested exemptions from the licensing requirements of 10 CFR 30.3 and 10 CFR 70.3 for the

byproduct and special nuclear material it seeks to transfer. These exemptions are necessary because the disposal of byproduct and special nuclear material must occur at a facility licensed to possess such material, and the USEI facility has no NRC license.

On October 4, 2012, USEI requested that they be considered a party to WEC's January 16, 2012, alternate disposal request and also requested exemptions from the requirements of 10 CFR 30.3 and 10 CFR 70.3.

On March 19, 2012 (77 FR 16077), the NRC published in the *Federal Register* a Notice of Opportunity for Hearing on the January 16, 2012, WEC license amendment request ADAMS Accession Nos. ML12017A188, ML12017A189 and ML12017A190. The NRC relied upon the information provided in the January 16, 2012, license amendment request and supporting documentation and other sources as noted in the Environmental Assessment's (EA) references section, in preparing the EA.

II. Environmental Assessment Summary

Under 10 CFR 20.2002, WEC proposes to dispose of about 23,000 m³ (30,000 yd³) of low-level waste (LLW) from the HDP that contains source, byproduct and special nuclear material at the USEI hazardous waste disposal facility near Grand View, Idaho. The LLW will be generated from building slabs, asphalt, soils, buried piping and miscellaneous equipment associated with HDP.

In 2002, WEC and the Missouri Department of Natural Resources (MDNR) entered into a Letter Agreement, which, among other things, provided for MDNR oversight of certain studies and response actions in accordance with the National Oil and Hazardous Substances Pollution Contingency Plan under the requirements of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), 42 U.S.C. §§ 9601 et seq. (Westinghouse MDNR Review Draft Remedial Design Work Plan, 2002 (ADAMS Accession No. ML020880266)).

Subsequently, Missouri and WEC entered into a Consent Decree, and the Letter Agreement was terminated. The Consent Decree provides for MDNR oversight of those portions of the investigation and selection of the remedy for Operable Units at the site that are not preempted by the Atomic Energy Act of 1954, as amended. The Selected Remedy for Operable Unit 1 at the HDP is Alternative 4: Removal, Treatment of Volatile Organic Compound Waste, and Off-site Disposal of Low-Level Radioactive Waste (LLRW) and Non-Hazardous Treatment Residues.

The no-action alternative involves discontinuing ongoing decommissioning activities at the HDP and leaving decommissioning waste, including concrete slabs, asphalt, soil, buried piping and miscellaneous equipment such as ductwork and air filters at the HDP site. This action would require an exemption from the requirement in 10 CFR 70.38(d) that decommissioning of facilities specifically licensed for possession and use of special nuclear material be completed and approved by the NRC after licensed activities cease. The no-action alternative would result in leaving approximately 23,000 m³ of total waste volume onsite.

Some of the radiologically contaminated remediation waste, regulated by the NRC is commingled with chemically contaminated waste regulated under CERCLA. The “no action alternative” would not be in accordance with the July 2009, CERCLA Record of Decision for removal and subsequent treatment of the chemically contaminated waste.

The no action alternative would not allow the WEC to meet the requirements of 10 CFR 20.1402 for unrestricted release. Selection of this alternative would require the WEC to continue environmental monitoring/surveillance and to maintain administrative and engineered controls to ensure facility safety and security. Environmental impacts of the no-action alternative would be similar to the impacts which existed prior to the start of decommissioning and could escalate if groundwater contamination spreads and material such as Tc-99 continues to leach from the limestone at the site. The environmental impacts which were occurring prior to

the advent of decommissioning were those associated with the maintenance of the Hematite facility. During that time there were discharges from the sanitary waste facility, traffic associated with workers traversing to and from the site and vehicular traffic associated with entities providing services and supplies to the Hematite facility and their associated emissions.

Another alternative to the proposed action is to dispose of the low activity LLRW in a facility licensed by an NRC Agreement State for the storage and/or disposal of LLRW. For this EA, the NRC evaluated the EnergySolutions, LLC (EnergySolutions) Clive, Utah facility as the alternative disposal site for the radioactive and chemically hazardous waste. This is the same facility that was evaluated as an alternative disposal site in the 10 CFR 20.2002 request approved in Hematite License Amendment 58.

The EnergySolutions LLRW disposal facility at Clive, Utah is located 128 kilometers (80 miles) west of Salt Lake City, Utah and 70 kilometers (45 miles) east of Wendover Nevada. The site is arid with an annual precipitation of approximately 20 centimeters (8 inches). The facility is licensed by the State of Utah to dispose of Class A radioactive waste only (Utah License 2300249) and 11e.(2) byproduct material (UT2300478) and is issued a Part B Resource Conservation and Recovery Act solid waste permit (EPA ID No. UTD982598898).

The EnergySolutions LLRW facility routinely manages the disposal of Class A LLRW containing low concentrations of special nuclear material (SNM) in above ground disposal cells. SNM quantities, below what the NRC would consider to be a critical mass (i.e., 350 grams of U-235) do not require an NRC SNM license under 10 CFR Part 70. In this particular case, regulation would be by the State of Utah, as an agreement state authorized under 10 CFR Part 150, "*Exemptions and Continued Regulatory Authority in Agreements States and in Offshore Waters Under Section 274.*" EnergySolutions, however, operates under a concentration based SNM limit instead of a total mass limit of 350 grams of SNM. This revision to the EnergySolutions license was approved after the NRC independently confirmed that the

concentration limits ensured that all potential criticality safety concerns had been met. The SNM concentration limits are specified in the facility's radioactive materials license (Utah License 2300249). The U-235 concentration limit is 1,900 pCi/g for enrichments below 10% and 1,190 pCi/g for enrichments above 10% thus allowing the facility to routinely operate above a mass limit of 350 grams of SNM.

The selection of this alternative would allow WEC to meet the requirements of 10 CFR 20.1402 for unrestricted release. In addition, this site is environmentally similar to USEI. However, this alternative was not selected by the licensee.

III. Finding of No Significant Impact

On the basis of the EA, the NRC has concluded that there are no significant environmental impacts and the issuance of a 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.

IV. Further Information

Documents related to this action, including the letter requesting the amendment and supporting documentation are available online in the NRC Library at <http://www.nrc.gov/reading-rm/adams.html>. The ADAMS accession numbers for the documents related to this notice are:

- (1) Hematite Decommissioning Project Alternate Disposal Request (ML12017A188, ML12017A189 and ML12017A190
- (2) Environmental Assessment (ML12321A147); and
- (3) Notice of Opportunity for Hearing (ML120240752).

If you do not have access to ADAMS or if there are problems in accessing the documents located in ADAMS, contact the NRC's Public Document Room (PDR) Reference staff at 800-397-4209, 301-415-4737, or by email to pdr.resource@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 Rockville, Maryland this 25th day of January, 2013.

FOR THE NUCLEAR REGULATORY COMMISSION

/RA/

Andrew Persinko, Deputy Director
Decommissioning and Uranium Recovery
Licensing Directorate,
Division of Waste Management
and Environmental Protection,
Office of Federal and State Materials
and Environmental Management Programs.