

NUCLEAR REGULATORY COMMISSION

[Docket No. 70-1151; NRC-2021-0062]

Westinghouse Electric Company, LLC;

Columbia Fuel Fabrication Facility; and

US Ecology, Inc.;

**Idaho Resource Conservation and Recovery Act Subtitle C Hazardous Disposal
Facility Located Near Grand View, Idaho**

AGENCY: Nuclear Regulatory Commission.

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

SUMMARY: The U.S. Nuclear Regulatory Commission (NRC) is issuing an environmental assessment (EA) and finding of no significant impact (FONSI) related to a request for alternate disposal, exemptions, and associated license amendment for the disposition of waste containing byproduct material and special nuclear material (SNM) from the Westinghouse Electric Company, LLC's (WEC) Columbia Fuel Fabrication Facility (CFFF) in Hopkins, South Carolina, under License Number SNM-1107. The material will be transported to and disposed consistent with a previously granted exemption granted to WEC and the US Ecology, Inc. (USEI) disposal facility, located near Grand View, Idaho, which is a Subtitle C Resource Conservation and Recovery Act (RCRA) hazardous waste disposal facility permitted by the State of Idaho to receive low-level radioactive waste. The NRC is also considering the related action of approving a corresponding exemption to USEI. Approval of the alternate disposal request from WEC and the exemptions requested by WEC and USEI would allow WEC to transfer the specific waste from CFFF for disposal at USEI.

DATES: The EA and FONSI referenced in this document are available on **[INSERT DATE OF PUBLICATION IN THE *FEDERAL REGISTER*]**.

ADDRESSES: Please refer to Docket ID **NRC-2021-0062** when contacting the NRC about the availability of information regarding this document. You may obtain publicly available information related to this document using any of the following methods:

- **Federal Rulemaking Web Site:** Go to <https://www.regulations.gov> and search for Docket ID **NRC-2021-0062**. Address questions about Docket IDs in Regulations.gov to Stacy Schumann; telephone: 301-415-0624; e-mail: Stacy.Schumann@nrc.gov. For technical questions, contact the individual listed in the **FOR FURTHER INFORMATION CONTACT** section of this document.

- **NRC's Agencywide Documents Access and Management System (ADAMS):** You may obtain publicly available documents online in the ADAMS Public Documents collection at <https://www.nrc.gov/reading-rm/adams.html>. To begin the search, 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. For the convenience of the reader, instructions about obtaining materials referenced in this document are provided in the "Availability of Documents" section.

- **Attention:** The PDR, where you may examine and order copies of public documents, is currently closed. You may submit your request to the PDR via e-mail at PDR.Resource@nrc.gov or call 1-800-397-4209 or 301-415-4737, between 8:00 a.m. and 4:00 p.m. (EST), Monday through Friday, except Federal holidays.

FOR FURTHER INFORMATION CONTACT: David Tiktinsky, Office of Nuclear Material Safety and Safeguards, U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001; telephone: 301-415-8740, e-mail: David.Tiktinsky@nrc.gov.

SUPPLEMENTARY INFORMATION:

I. Introduction

By letter dated February 8, 2021, WEC requested an exemption and associated license amendment to License SNM-1107, issued for the operation of CFFF located in Hopkins, South Carolina pursuant to section 20.2002 of title 10 of the *Code of Federal Regulations* (10 CFR). By letter dated February 25, 2021, USEI incorporated the WEC application in its request for a corresponding exemption. The requests are for NRC authorization for an alternate disposal of specified NRC-licensed byproduct and SNM from the CFFF. As required by 10 CFR 51.21, the NRC conducted an EA. Based on the results of the EA that follows, the NRC has determined that pursuant to 10 CFR 51.31, preparation of an environmental impact statement for the exemption request is not required and pursuant to 10 CFR 51.32, issuance of a FONSI is appropriate.

Westinghouse had previously requested and received an exemption and license amendment, dated December 9, 2020 to, among other things, transfer approximately 1428 m³ (50,400 ft³) of solid contaminated Calcium Fluoride (CaF₂) sludge to the USEI RCRA Subtitle C hazardous waste disposal facility near Grand View, Idaho that was dredged from the Calcium Fluoride Lagoons and subsequently placed in a storage pile. USEI was granted a corresponding exemption to receive and dispose of this material on December 9, 2020.

After Westinghouse moved the CaF₂ sludge dredged from the Calcium Fluoride Lagoons, WEC discovered that the actual volume was less than the 1428 m³ (50,400 ft³) previously estimated. The actual volume was 694 m³ (24,500 ft³). In its subsequent application, WEC stated its intent to use other, similar CaF₂ material in order to aggregate the waste for disposal as requested and approved in the December 9, 2020

authorization. In its February 8, 2021 letter, WEC requested an exemption and license amendment to dispose of 733 m³ (25,900 ft³) of similar CaF₂ from another source, the “Operations” pile. The total amount of CaF₂ material (from the previous approval and that under consideration here) would not exceed the previously approved volume of 1428 m³ (50,400 ft³), nor would it exceed the parameters of the radiological characterization that formed the basis of the NRC staff’s previous approvals, as documented in the Safety Evaluation Report (SER).

II. Environmental Assessment

Description of the Proposed Action

WEC and USEI requested NRC approval for a 10 CFR 20.2002 alternate disposal request, exemptions to 10 CFR part 70.3 and 10 CFR 30.3, and a conforming WEC license amendment to allow WEC to transfer specific waste from CFFF for disposal at the USEI disposal facility.

Waste being considered in this request includes approximately 708 m³ (25,900 ft³) of previously dredged CaF₂ sludge being stored on the operations pile. WEC proposes to mix this material with other waste and Portland cement to stabilize the material for shipping. WEC proposes to transport this aggregated waste stream to USEI using a combination of trucks and railcars. The combined volume of CaF₂ sludge disposed of under the December 9, 2020 authorization and that under consideration here would not exceed the previously approved volume of 1428 m³ (50,400 ft³) of CaF₂.

The waste streams would be transported from CFFF in South Carolina to the USEI facility, Grand View, Idaho in the Owyhee Desert. The USEI facility is an RCRA Subtitle C hazardous waste disposal facility permitted by the State of Idaho. The USEI site has both natural and engineered features that limit the transport of radioactive material. The natural features include a low precipitation rate [i.e., 18.4 cm/year (7.4

in./year)] and a long vertical distance to groundwater (i.e., 61-meter (203-ft) thick on average unsaturated zone below the disposal zone). The engineered features include an engineered cover, liners, and leachate monitoring systems. Because the USEI facility is not licensed by the NRC, this proposed action requires the NRC to exempt USEI from the Atomic Energy Act of 1954, and NRC licensing requirements with respect to USEI's requested receipt and disposal of this material.

Need for the Proposed Action

The need for the proposed action is to authorize a safe and appropriate method of disposal for the subject waste material generated during day-to-day activities and currently being stored at the CFFF. Specifically, the East Lagoon is in the process of being closed in accordance with a consent agreement and regulations set by the South Carolina Department of Health and Environmental Control (SCDHEC). Thus, material associated with the East Lagoon must be removed from the site in order to comply with regulatory requirements. As was the case with the May 8, 2020 request, the subject CaF_2 material and Portland cement would be used to stabilize this material for transport and disposal. The proposed alternate disposal would also conserve low-level radioactive waste disposal capacity at licensed low-level radioactive disposal sites while ensuring that the material being considered is disposed of safely in a regulated facility.

Environmental Impacts of the Proposed Action

The NRC staff reviewed the information provided by WEC to support their 10 CFR 20.2002 alternate disposal request and for the specific exemptions from 10 CFR 30.3 and 10 CFR 70.3 in order to dispose of the CaF_2 waste. Under the 10 CFR 20.2002 criteria, a licensee may seek NRC authorization to dispose of licensed material using procedures not otherwise authorized by NRC regulations. The licensee's supporting analysis must show that the radiological doses arising from the proposed

10 CFR 20.2002 disposal will be as low as reasonably achievable and within the 10 CFR part 20 dose limits.

WEC previously performed a radiological assessment in consultation with USEI. Based on this assessment, WEC concluded that potential doses to members of the public, including transportation workers and USEI workers involved in processing and disposing of the waste upon its arrival at USEI, are less than 1 mrem/y, well within the “few mrem” criteria that the NRC established (see NUREG-1757, Volume 1, Revision 2).

As documented in the SER, the NRC staff reviewed scenarios and related input parameters considered by WEC and USEI and found that they are appropriate for the scenarios considered. The NRC staff also reviewed the projected doses from the post-closure and intruder scenarios at USEI and found them acceptable. NRC staff did note that the inadvertent intruder construction scenario had potential doses that were larger than the other inadvertent intruder scenarios evaluated, but the NRC does not consider this scenario to be feasible due to the configuration of the disposal cells and USEI’s waste disposal practices. NRC staff also notes that the proposed disposals are also subject to regulation under RCRA. These conclusions are consistent with the NRC’s findings in its SER for the previous request, reflective of the similar radiological characteristics of the material from the operations pile and that described in the May 8, 2020 request.

Based upon its the previously noted evaluation and its assessment of the potential impacts of the proposed action, in addition to focusing on the potential radiological impacts as previously discussed, this EA next considers potential environmental impacts from non-radiological materials. With regard to potential non-radiological impacts, the NRC staff concludes that approval of the proposed request to dispose of material with small amounts of radioactive material would not have significant

environmental impacts, including effects on non-radiological effluents, air quality, or noise. In addition, approval of the proposed action will not significantly increase the probability or consequences of accidents as well as occupational and public radiation exposure because of the quantities and forms of material involved, as further evaluated in the NRC's SER.

Therefore, due to the very small amounts of radioactive material involved, the evaluation noted earlier, and the NRC staff's analysis in the SER and its SER for the May 8, 2020 request, the NRC staff finds that the environmental impacts of the proposed action are not significant.

Environmental Impacts of the Alternatives to the Proposed Action

As an alternative to the proposed action, the NRC staff considered the no-action alternative in which the NRC staff would deny the disposal request. Denial of the request would require WEC to find another disposal pathway for this material, and would ultimately only change the location of the disposal site. All other factors would remain the same or similar. Therefore, the no-action alternative was not further considered. NRC staff also notes that pursuing the no-action alternative would result in the licensee potentially violating the SCDHEC requirements to remove the material from the East Lagoon so that it can be remediated while it identifies another disposal option.

III. Finding of No Significant Impact

The proposed action consists of NRC approval of (a) WEC's and USEI's alternate disposal requests under 10 CFR 20.2002, (b) WEC and USEI's exemption request under 10 CFR 30.11(a) and 10 CFR 70.11(a), and (c) the issuance of a conforming license amendment to WEC. Based on this EA, the NRC finds that there are no significant environmental impacts from the proposed action. Therefore, the NRC has

determined, pursuant to 10 CFR 51.31, that preparation of an environmental impact statement is not required for the proposed action and a FONSI is appropriate.

IV. Availability of Documents

The documents identified in the following table are available to interested persons through one or more of the following methods, as indicated.

DOCUMENT	ADAMS ACCESSION NO.
Request for Alternate Disposal Approval and Exemption for Specific Columbia Fuel Fabrication Waste, dated February 8, 2021	ML21039A719
Request for Exemptions under 10 CFR 30.11 and 10 CFR 70.17 for Alternate Disposal of Wastes from Columbia Fuel Fabrication Facility under 10 CFR 20.2002, dated February 25, 2021	ML21061A273
Westinghouse Electric Company, LLC - Amendment 25 to Material License SNM-1107, Exemption for Alternate Disposal of Specific Waste (Enterprise Project Identifier L-2020-LLL-0009), dated December 9, 2020	ML20302A084
Exemption for Alternate Disposal of Specific Waste from the Westinghouse Columbia Fuel Fabrication Facility under 10 CFR 20.2002, 10 CFR 30.11 and 10 CFR 70.17, dated December 9, 2020	ML20304A341
Request for Alternate Disposal Approval and Exemption for Specific Columbia Fuel Fabrication Facility Waste (License No. SNM-1197, Docket No. 70-1151), dated May 8, 2020	ML20129J934 (Package)
Request for Exemptions under 10 CFR 30.11 and 10 CFR 70.17 for Alternate Disposal of Wastes from Columbia Fuel Fabrication Facility under 10 CFR 20.2002, dated May 11, 2020	ML20280A601
Response to Request for Additional Information – Alternate Disposal Approval and Exemptions for Specific Columbia Fuel Fabrication Facility Waste (License No. SNM-1107, Docket No. 70-1151), dated October 13, 2020	ML20287A545

Response to Request for Additional Information – Alternate Disposal Approval and Exemptions for Specific Columbia Fuel Fabrication Facility Waste (License No. SNM-1107, Docket No. 70-1151), dated September 22, 2020	ML20266G551
Safety Evaluation Report	ML20302A085
NUREG-1757, Volume 1, Revision 2, "Consolidated Decommissioning Guidance"	ML063000243

Dated: March 8, 2021.

For the Nuclear Regulatory Commission.

/RA/

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