

**NUCLEAR REGULATORY COMMISSION**

**[Docket No. 70-00143; NRC-2022-0097]**

**Nuclear Fuel Services, Inc.**

**U-Metal Project**

**AGENCY:** Nuclear Regulatory Commission.

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

**SUMMARY:** The U.S. Nuclear Regulatory Commission (NRC) is issuing a finding of no significant impact (FONSI) and accompanying environmental assessment (EA) regarding the NRC's consideration of a license amendment request to amend a Special Nuclear Material (SNM) license, SNM-124, held by Nuclear Fuel Service, Inc. (NFS) at the NFS site located in Erwin, Tennessee. If approved, the amendment would authorize NFS to operate uranium purification and conversion services (U-Metal Project) at the NFS site, pursuant to a contract with the U.S. Department of Energy's National Nuclear Security Administration. Based on the EA, the NRC staff has concluded that there will be no significant impacts to environmental resources from the requested license amendment, and therefore, a FONSI is appropriate.

**DATES:** The EA and FONSI referenced in this document is available on November 6, 2023.

**ADDRESSES:** Please refer to Docket ID **NRC-2022-0097** 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 Website:** Go to <https://www.regulations.gov> and search for Docket ID **NRC-2022-0097**. Address questions about Docket IDs in Regulations.gov to Stacy Schumann; telephone: 301-415-0624; email: 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, at 301-415-4737, or by email 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 of this document.

- **NRC’s PDR:** The PDR, where you may examine and order copies of publicly available documents, is open by appointment. To make an appointment to visit the PDR, please send an email to PDR.Resource@nrc.gov or call 1-800-397-4209 or 301-415-4737, between 8 a.m. and 4 p.m. eastern time (ET), Monday through Friday, except Federal holidays.

**FOR FURTHER INFORMATION CONTACT:** Ashley Waldron, Office of Nuclear Material Safety and Safeguards, U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001; telephone: 301-415-7317, email: Ashley.Waldron@nrc.gov.

**SUPPLEMENTARY INFORMATION:**

**I. Introduction**

The NRC is considering issuance of a license amendment request to amend NFS’s part 70 of title 10 of the *Code of Federal Regulations* (10 CFR) SNM license,

SNM-124. The license amendment would authorize a change to current operations to include a U-Metal Project at NFS's site located in Erwin, Tennessee. As required by 10 CFR part 51, "Environmental Protection Regulations for Domestic Licensing and Related Regulatory Functions," the NRC prepared an EA. Based on the results of the EA, the NRC has determined not to prepare an environmental impact statement (EIS) for the license amendment request and is issuing a FONSI.

NFS's 10 CFR part 70 license was originally issued by the Atomic Energy Commission to W.R. Grace and Company, Davison Chemical Division, on September 18, 1957. W.R. Grace and Company authorized initial facility operations with enriched uranium. Later, the license was transferred to NFS on December 31, 1963. The license was renewed on the following dates: November 5, 1965; January 27, 1978; March 16, 1979; June 9, 1992; and July 2, 1999. On August 9, 2012, the NRC renewed NFS's license SNM-124 for a period of 25 years, which will allow operations through 2037.

## **II. Environmental Assessment**

### *Description of the Proposed Action*

The proposed action is issuance of a license amendment to NFS's 10 CFR part 70 SNM license, SNM-124, to authorize construction and operation of the U-Metal Project at the NFS facility pursuant to a contract with the U.S. Department of Energy's National Nuclear Security Administration (NNSA).

The proposed action is described in the NFS's application and environmental report dated November 18, 2021, as supplemented by letters dated on March 7, 2022, and January 31, 2023.

### *Need for the Proposed Action*

The proposed action is needed for NFS to maintain the ability to convert oxides to metal, provide a redundancy for the purification of uranium metals, and hedge against the technology risk associated with a new electrorefining facility.

### *Environmental Impacts of the Proposed Action*

The NRC staff considered the potential impacts of the proposed action on land use, historical and cultural resources; visual and scenic resources; meteorology, climatology, and air quality; noise; geologic resource; water resources; ecological resources; socioeconomics; public and occupation health; transportation; environmental justice; and waste management. Given that construction would occur within the industrial facility footprint and within previous disturbed areas, and all other proposed activities would occur in an existing building, the activities associated with the proposed amendment would likely not alter any of the current characteristics of the site. Additionally, the proposed action would not result in significantly increased effluents. The proposed activities would not be expected to add to historical site contamination. Therefore, the proposed action would result in insignificant impacts and would not contribute to potential cumulative impacts when added to the past, present, or reasonably foreseeable future actions on the NFS site. Any future proposal to conduct NRC-regulated activities beyond the scope of the present license amendment would be evaluated, as appropriate, as part of a separate licensing and environmental review.

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

As an alternative to the proposed action, the NRC staff considered denial of the proposed action (i.e., the “no-action” alternative). Under the no-action alternative, the NRC would not amend the license to authorize construction and operation of new U-Metal Project at the NFS site. The NNSA would not have an option for conversion

services to replace the legacy uranium processing equipment temporarily until the new electrorefining technology to purify high-enriched uranium metal is available, nor would NNSA have a redundancy for the purification of uranium metals.

#### *Agencies and Persons Consulted*

On March 29, 2023, the NRC staff provided a copy of the draft EA to the State of Tennessee Division of Radiological Health for its review and comment. In its May 4, 2023, email response, the State noted that it has no concerns regarding the environmental impact of the proposed action. The State official concurred with the EA and FONSI.

The NRC completed consultation under Section 106 of the National Historic Preservation Act by consulting with the Tennessee State Historic Preservation Office and four Federally recognized Indian Tribes in correspondence dated September 13, 2022. In addition, the NRC staff, consulted with the U.S. Fish and Wildlife Service (FWS) and determined that the proposed action “may affect, but not likely to adversely affect” five threatened or endangered species, would have “no effect” on one additional species, and would have “no effect” on critical habitat. The NRC staff provided its effect determinations to FWS on August 18, 2023, and FWS concurred with those findings on September 28, 2023. Therefore, consultation has been completed under Section 7 of the Endangered Species Act.

### **III. Finding of No Significant Impact**

Based on its review of the license amendment request, in accordance with the requirements of 10 CFR part 51, the NRC staff has determined that issuing the requested amendment of SNM-124 to add the U-Metal Project would not significantly affect the quality of human environment. No significant radiological or non-radiological impacts are expected from the proposed action. Therefore, the NRC staff has

determined that pursuant to 10 CFR 51.31, “Determinations based on environmental assessment,” preparation of an EIS is not required for the proposed action, and pursuant to 10 CFR 51.32, “Finding of no significant impact,” a FONSI is appropriate. In accordance with 10 CFR 51.32(a)(4), this FONSI incorporates the EA set forth in this notice by reference.

#### **IV. Availability of Documents**

The documents identified in the following table are available to interested persons through ADAMS.

<b>Document Description</b>	<b>ADAMS Accession No.</b>
Nuclear Fuel Services, License Amendment Application, dated November 18, 2021.	ML21327A099
Nuclear Fuel Services Supplemental Environmental Report, dated November 2021 and revised January 2023.	ML22066B005 and ML23041A236
Tennessee Department of Environmental Quality email response NRC Request for Review of Draft EA, dated May 4, 2023.	ML23131A361
Letter to Tennessee State Historic Preservation Office initiating consultation under Section 106 of the National Historic Preservation Act, dated September 13, 2022.	ML22098A154
NRC letters to Tribal nations initiating consultation under Section 106 of the National Historic Preservation Act, dated September 13, 2022.	ML22256A146 (package)
Fish and Wildlife Service, Information for Planning and Consultation identifying Threatened or Endangered Species, dated June 6, 2023.	ML23202A166
NRC letter to FWS regarding informal Section 7 consultation, determinations of effect, dated August 18, 2023.	ML23228A158
Fish and Wildlife Service concurrence on NRC’s determinations of effect, dated September 28, 2023.	ML23272A109
Final Environmental Assessment for NFS Proposed U-Metal Project, dated	ML23299A062

October 26, 2023.	
-------------------	--

Dated: October 31, 2023.

For the Nuclear Regulatory Commission.

*/RA/*

Michelle S. Rome, Acting Chief,  
Environmental Review Materials Branch,  
Division of Rulemaking, Environmental,  
and Financial Support,  
Office of Nuclear Material Safety,  
and Safeguards.