

May 22, 2006

MEMORANDUM TO: Michael T. Lesar, Chief
Rules Review and Directives Branch
Division of Administrative Services
Office of Administration

FROM: Kevin M. Ramsey, Project Manager **/RA/**
Fuel Cycle Facilities Branch
Division of Fuel Cycle Safety
and Safeguards
Office of Nuclear Material Safety
and Safeguards

SUBJECT: NOTICE OF AVAILABILITY OF ENVIRONMENTAL ASSESSMENT AND
FINDING OF NO SIGNIFICANT IMPACT CONCERNING REQUEST FOR
EXEMPTION FROM NUCLEAR FUEL SERVICES, ERWIN, TN

Attached please find one signed original, four copies, and an electronic version on a 3.5-inch diskette of the subject *Federal Register Notice* for transmittal to the Office of the Federal Register for publication.

ADM/DAS/RDB has been given owner's rights to the Notice in the U.S. Nuclear Regulatory Commission (NRC) Agencywide Documents Access Management System (ADAMS) (ML061310504). Please note that most of the documents referenced in the notice are nonpublic. A statement concerning how documents may be made available is provided in Section III, Further Information.

Docket No.: 70-143
License No.: SNM-124

Staff Contact: Kevin Ramsey
Phone No.: (301) 415-7887

Enclosures: 1. One original and four copies
2. One 3.5-inch diskette

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NUCLEAR REGULATORY COMMISSION
DOCKET NO. 70-143
NUCLEAR FUEL SERVICES, INC.,
ENVIRONMENTAL ASSESSMENT AND FINDING OF
NO SIGNIFICANT IMPACT FOR PROPOSED
EXTENSION OF DEADLINE FOR INVENTORY OF
SPECIAL NUCLEAR MATERIAL

AGENCY: Nuclear Regulatory Commission.

ACTION: Environmental Assessment and Finding of No Significant Impact.

FOR FURTHER INFORMATION CONTACT: Kevin M. Ramsey, Project Manager, Fuel Cycle Facilities Branch, Division of Fuel Cycle Safety and Safeguards, Office of Nuclear Material Safety and Safeguards, U.S. Nuclear Regulatory Commission, Mail Stop T-8F42, Rockville, MD. 20555-0001, Telephone (301) 415-7887; fax (301) 415-5955; e-mail kmr@nrc.gov.

SUPPLEMENTARY INFORMATION:

I. Introduction:

The Nuclear Regulatory Commission (NRC) staff is considering the issuance of a license amendment to Materials License SNM-124, to Nuclear Fuel Services, Inc. (NFS) (the licensee), to grant a one-time exemption from the May 2006 inventory results for strategic special nuclear material in the Blended Low-Enriched Uranium Preparation Facility (BPF). The NRC has prepared an Environmental Assessment (EA) in support of this amendment in accordance with the requirements of 10 CFR Part 51. Based on the EA, the NRC has

concluded that a Finding of No Significant Impact (FONSI) is appropriate and, therefore, an Environmental Impact Statement (EIS) will not be prepared.

II. Environmental Assessment:

Background

The NFS facility in Erwin, Tennessee is authorized, under License SNM-124 to manufacture high-enriched nuclear reactor fuel. In addition, NFS is authorized to blend highly enriched uranium (HEU) with natural uranium and manufacture low-enriched nuclear reactor fuel. Currently, BPF is in a safe-shutdown mode, in accordance with Confirmatory Action Letter (CAL) No. 02-06-003 dated March 18, 2006. Operations in BPF were shut down without the usual material processing/clean-out that is required to be undertaken as part of a measured physical inventory. NFS is currently in the process of conducting an operational readiness review (ORR) which must be reviewed and approved by NRC before operations are restarted. This is expected to occur on or before June 20, 2006. After operations are authorized, the BPF must be operated for a minimum of two weeks to process the material to a form suitable for a measurable physical inventory. NFS requests that the inventory reporting date be extended until 45 days after the completion of the ORR and the processing/inventory process clean out resumes, the date of which is not now specifically known.

Review Scope

The purpose of this EA is to assess the environmental impacts of the proposed license amendment. It does not approve the request. This EA is limited to the proposed exemption and any cumulative impacts on existing plant operations. The existing conditions and operations for the Erwin facility were evaluated by the NRC for environmental impacts in a 1999 EA related to the renewal of the NFS license (Ref. 1) and a 2002 EA related to the first

amendment for the Blended Low-Enriched Uranium (BLEU) Project (Ref. 2). The 2002 EA assessed the impact of the entire BLEU Project, using information available at that time. A 2003 EA (Ref. 3) and a 2004 EA (Ref. 4), related to additional BLEU Project amendments, confirmed the FONSI issued in 2002. This assessment presents information and analysis for determining that the issuance of a FONSI is appropriate and that an EIS will not be prepared.

Proposed Action

The proposed action is to amend NRC Materials License SNM-124 to grant a one-time exemption from the physical inventory deadline for strategic special nuclear material in the BPF. The exemption would authorize NFS to submit the physical inventory results after NRC has authorized the restart of operations in the BPF and NFS has had an opportunity to process the material and complete the inventory. The proposed action is limited to the reporting deadline only. No change to processing, packaging, or storage operations is requested, and no construction of new facilities is requested.

Need for Proposed Action

The proposed action is being requested because NFS had to secure operations in the BPF to investigate an upset condition. NFS has committed to maintain the BPF in a safe-shutdown mode until NRC authorizes restart of operations. Regulations in 10 CFR 74.59(f)(1) require a physical inventory of strategic special nuclear material every six months. To comply with this regulation, the material must be processed into a form that can be inventoried. Material in the BPF process is not in a form that can be inventoried and it cannot be processed into the proper form until the restart of operations is authorized.

Alternatives

The alternatives available to NRC are:

1. Approve the license amendment as described; or
2. No action (i.e., deny the request).

Affected Environment

The affected environment for the proposed action and the no action alternative is the NFS site. The NFS facility is located in Unicoi County, Tennessee, about 32 km (20 mi) southwest of Johnson City, Tennessee. The facility is about 0.8 km (0.5 mi) southwest of the Erwin city limits. The affected environment is identical to the affected environment assessed in the 2002 EA related to the first amendment for the BLEU Project (Ref. 2). A full description of the site and its characteristics are given in the 2002 EA. Additional information can be found in the 1999 EA related to the renewal of the NFS license (Ref. 1). The site occupies about 28 hectares (70 acres). The site is bounded to the northwest by the CSX Corporation (CSX) railroad property and the Nolichucky River, and by Martin Creek to the northeast. The plant elevation is about 9 m (30 ft) above the nearest point on the Nolichucky River.

The area adjacent to the site consists primarily of residential, industrial, and commercial areas, with a limited amount of farming to the northwest. Privately owned residences are located to the east and south of the facility. Tract size is relatively large, leading to a low housing density in the areas adjacent to the facility. The CSX railroad right-of-way is parallel to the western boundary of the site. Industrial development is located adjacent to the railroad on the opposite side of the right-of-way. The site is bounded by Martin Creek to the north, with privately owned, vacant property and low-density residences.

Environmental Impacts of Proposed Action and Alternatives

1. Occupational and Public Health

Proposed Action

The occupational and public health impacts from the proposed action are essentially the same as those considered in the environmental assessment for operation of the BPF (Ref. 3). Maintaining the BPF in a safe-shutdown mode will reduce the emissions from normal operations and reduce the risk of accidents. However, the reductions would be so small that the differences would be negligible.

No Action

Denying this amendment request would not result in any significant difference in the occupational and public health impacts. If this amendment request is denied, the licensee may be cited for failing to submit a required report. However, the material cannot be inventoried until it is processed into an appropriate form. The facility will continue to implement NRC-approved radiation safety procedures for storing and handling radioactive materials. Thus, the impacts under the “no action” alternative will remain within acceptable regulatory limits.

2. Effluent Releases, Environmental Monitoring, Water Resources, Geology, Soils, Air Quality, Demography, Biota, Cultural and Historic Resources

Proposed Action

The NRC staff has determined that the approval of the proposed amendment will not impact effluent releases, environmental monitoring, water resources, geology, soils, air quality, demography, biota, or cultural or historic resources at or near the NFS site.

No Action

The NRC staff has determined that denial of the proposed amendment will not impact effluent releases, environmental monitoring, water resources, geology, soils, air quality, demography, biota, or cultural or historic resources at or near the NFS site.

Conclusion

Based on its review, the NRC has concluded that the environmental impacts associated with the proposed action are not significant and, therefore, do not warrant denial of the proposed license amendment. The NRC has determined that the proposed action, approval of the license amendment as described, is the appropriate alternative for selection. Based on an evaluation of the environmental impacts of the proposed license amendment, the NRC has determined that the proper action is to issue a FONSI.

Agencies and Persons Contacted

On May 11, 2006, the NRC staff contacted the Deputy Director of the Division of Radiological Health in the Tennessee Department of Environment and Conservation (TDEC) concerning this EA. On May 12, 2006, the Deputy Director responded that TDEC reviewed the draft EA and had no comments (Ref. 6).

The NRC staff has determined that the proposed action will not affect listed species or critical habitat. Therefore, no consultation is required under Section 7 of the Endangered Species Act. Likewise, the NRC staff has determined that the proposed action is not the type of activity that has the potential to cause effects on historic properties. Therefore, no consultation is required under Section 106 of the National Historic Preservation Act.

References

1. U.S. Nuclear Regulatory Commission, "Environmental Assessment for Renewal of Special Nuclear Material License No. SNM-124," January 1999, ADAMS No. ML031150418.
2. U.S. Nuclear Regulatory Commission, "Environmental Assessment for Proposed License Amendments to Special Nuclear Material License No. SNM-124 Regarding Downblending and Oxide Conversion of Surplus High-Enriched Uranium," June 2002, ADAMS No. ML021790068.
3. U.S. Nuclear Regulatory Commission, "Environmental Assessment and Finding of No Significant Impact for the BLEU Preparation Facility," September 2003, ADAMS No. ML032390428.
4. U.S. Nuclear Regulatory Commission, "Environmental Assessment and Finding of No Significant Impact for the Oxide Conversion Building and the Effluent Processing Building at the BLEU Complex," June 2004, ADAMS No. ML041470176.
5. Nuclear Fuel Services, "Request for One-Time Exemption," April 13, 2006, ADAMS No. ML061150255.
6. D. Shults, Tennessee Division of Radiological Health, e-mail to K. Ramsey, U.S. Nuclear Regulatory Commission, "EA for NFS Exemption," May 12, 2006, ADAMS No. ML061350156.

III. Finding of No Significant Impact:

Pursuant to 10 CFR Part 51, the NRC staff has considered the environmental consequences of amending NRC Materials License SNM-124 to grant a one-time exemption from the physical inventory deadline for strategic special nuclear material in the BPF. On the basis of this EA, the NRC has concluded that there are no significant environmental impacts

associated with the proposed amendment and has determined not to prepare an EIS for the proposed amendment.

IV. Further Information

The documents referenced in this notice may be made available to interested parties pursuant to a protective order and subject to applicable security requirements upon a showing that the party has an interest that may be affected by the proposed action.

Dated at Rockville, Maryland, this 22nd day of May 2006.

For the Nuclear Regulatory Commission.

/RA/

Gary S. Janosko, Chief
Fuel Cycle Facilities Branch
Division of Fuel Cycle Safety
and Safeguards
Office of Nuclear Material Safety
and Safeguards