

February 4, 2009

Ms. B. Marie Moore, Vice President
Safety and Regulatory
Nuclear Fuel Services, Inc.
P.O. Box 337, MS 123
Erwin, TN 37650

SUBJECT: AMENDMENT 86 TO LICENSE SNM-124: APPROVAL OF CHANGES TO
FUNDAMENTAL NUCLEAR MATERIAL CONTROL PLAN FOR HIGH
ENRICHED URANIUM (TAC L32685)

Dear Ms. Moore:

In accordance with your application dated May 9, 2008, as supplemented by your letters dated May 30 and December 19, 2008, and pursuant to Part 70 to Title 10 of the *Code of Federal Regulations* (10 CFR), Materials License SNM-124 is hereby amended to approve Section 1, Revision 24, and Section 3, Revision 9, to the Fundamental Nuclear Material Control Plan for high enriched uranium. Accordingly, Safety Condition S-1 has been revised to add the dates of May 9, May 30, and December 19, 2008. In addition, Safeguards Condition SG-5.1 has been revised to read as follows:

SG-5.1 In order to achieve the performance objectives of 10 CFR 74.51(a) and maintain the system capabilities identified in 10 CFR 74.51(b), the licensee shall follow its "Fundamental Nuclear Material Control Plan" with respect to all activities involving strategic special nuclear material, except as noted in Condition SG-5.5. This Plan, as currently revised and approved, consists of:

General Discussion -----	Rev. 8 (dated April 2005)
Section 1 -- Process Monitoring -----	Rev. 24 (dated November 2008)
Section 2 -- Item Monitoring -----	Rev. 8 (dated August 2006)
Section 3 -- Alarm Resolution -----	Rev. 9 (dated November 2008)
Section 4 -- QA & Accounting -----	Rev. 17 (dated June 2007)
Annex A -----	Rev. 6 (dated June 2007)
Annex B -----	Rev. 1 (dated August 1998)
Annex C -----	Rev. 1 (dated August 1998)
Annex D -----	Rev. 3 (dated June 2007)

Revisions to this Plan shall be made only in accordance with, and pursuant to, either 10 CFR 70.32(c) or 70.34.

B. M. Moore

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All other conditions of this license shall remain the same.

By approval of this amendment request, TAC L32685 will be closed.

If you have any questions concerning this letter, please contact Kevin Ramsey of my staff by phone at (301) 492-3123, or via e-mail to kevin.ramsey@nrc.gov.

In accordance with 10 CFR 2.390 of the U.S. Nuclear Regulatory Commission's (NRC) "Rules of Practice," a copy of this letter, the safety evaluation report, and the non-sensitive portion of the license will be available electronically for public inspection in the NRC Public Document Room and the Agencywide Documents Access and Management System (ADAMS). ADAMS is accessible through the NRC Web site at <http://www.nrc.gov/reading-rm/adams.html> (the Public Electronic Reading Room). The sensitive conditions to the license will be withheld from the public.

Sincerely,

/RA/

Michael D. Tschiltz, Deputy Director
Fuel Facility Licensing Directorate
Division of Fuel Cycle Safety
and Safeguards
Office of Nuclear Material Safety
and Safeguards

Docket No.: 70-143
License No.: SNM-124
Amendment 86

Enclosures:

1. Materials License SNM-124
2. Safeguards Evaluation Report (Public)
3. Detailed Evaluation Discussion (Non-Public)

Documents transmitted herewith contain OFFICIAL USE ONLY information. When separated from the sensitive conditions in Enclosure 1 and all of Enclosure 3, this document is DECONTROLLED

B. M. Moore

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Michael D. Tschiltz, Deputy Director
Fuel Facility Licensing Directorate
Division of Fuel Cycle Safety
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Office of Nuclear Material Safety
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ML090340469 (Package)

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DATE	2/3/09	2/4/09	2/4/09	2/4/09

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DOCKET: 70-143

LICENSEE: Nuclear Fuel Services, Inc.
Erwin, Tennessee

SUBJECT: SAFEGUARDS EVALUATION REPORT: CHANGES TO FUNDAMENTAL
NUCLEAR MATERIAL CONTROL PLAN FOR HIGH ENRICHED URANIUM

1.0 BACKGROUND

By letters dated May 9, May 30, and December 19, 2008, Nuclear Fuel Services (NFS) submitted two revised sections of its high enriched uranium (HEU) Fundamental Nuclear Material Control Plan (FNMCP). The evaluation of the submitted FNMCP was processed following the provisions of Title 10 *Code of Federal Regulations* (10 CFR), Section 70.34 to ensure there would be no decrease in the overall effectiveness of the licensee's material control and accounting (MC&A) program.

2.0 DISCUSSION

The licensee submitted a significant change to the uranium quantity limits for the activities involving research and development operations. A detailed discussion of our evaluation is provided in Enclosure 3. Based on the review and evaluation of the submittals, the staff has determined that the changes in the December 2008 revision to the facility's HEU FNMCP are appropriate and adequate, and meet the requirements of 10 CFR 74.53(c) and 74.57. Approval of the revised HEU FNMCP is recommended.

3.0 ENVIRONMENTAL REVIEW

The staff has concluded that the changes requested are related to safeguards matters, which are categorically excluded from the requirements to prepare a site-specific environmental assessment. Therefore, in accordance with 10 CFR 51.22(c)(12), neither an environmental assessment nor an environmental impact statement is warranted for this action.

4.0 CONCLUSION

The staff concludes that the revised HEU FNMCP contains appropriate and necessary commitments to meet applicable MC&A requirements stipulated in Subpart E of 10 CFR Part 74, and that approval of the revised Plan does not reduce the effectiveness of the licensee's safeguards system. Therefore, the existing Safeguards License Condition SG-5.1 of Materials License SNM-124 should be reissued to reflect the revised HEU FNMCP as follows:

SG-5.1 In order to achieve the performance objectives of 10 CFR 74.51(a) and maintain the system capabilities identified in 10 CFR 74.51(b), the licensee shall follow its "Fundamental Nuclear Material Control Plan" with respect to all activities involving strategic special nuclear material, except as noted in Condition SG-5.5. This Plan, as currently revised and approved, consists of:

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Revisions to this Plan shall be made only in accordance with, and pursuant to, either 10 CFR 70.32(c) or 70.34.

PRINCIPAL CONTRIBUTORS

Kevin M. Ramsey
Thomas N. Pham