September 28, 2010

Mr. Mark P. Elliott, Director
Quality, Safety and Safeguards
Nuclear Fuel Services, Inc.
P.O. Box 337, MS 123
Erwin, TN 37650

SUBJECT: NUCLEAR FUEL SERVICES, INC., REQUEST FOR ADDITIONAL INFORMATION CONCERNING CHANGES TO CHAPTER 3 REGARDING VENTILATION REQUIREMENTS (TAC NO. L33008)

Dear Mr. Elliott:

This letter is in response to your letter dated July 19, 2010, which submitted proposed changes to the ventilation requirements in Chapter 3 of your license commitments. Our review has identified that additional information is needed before your request can be approved.

The additional information specified in the enclosure should be provided to us within 30 days from the date of this letter. Please reference TAC No. L33008 in your response.

In accordance with Title 10 of the *Code of Federal Regulations* Section 2.390 of the U.S. Nuclear Regulatory Commission's (NRC) "Rules of Practice," a copy of this letter 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 from the NRC Web site at http://www.nrc.gov/reading-rm/adams.html (the Public Electronic Reading Room).

If you have any questions concerning this letter, please contact me at (301) 492-3123 or via e-mail to Kevin.Ramsey@nrc.gov.

Sincerely,

/RA/

Kevin M. Ramsey, Project Manager
Fuel Manufacturing Branch
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

Enclosure: Request for Additional Information

Mr. Mark P. Elliott, Director
Quality, Safety and Safeguards
Nuclear Fuel Services, Inc.
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Request for Additional Information
Regarding Changes to Ventilation Requirements
in Chapter 3 of SNM-124

The following information is required to verify compliance with 10 CFR 20.1101 which requires a radiation protection program sufficient to ensure compliance with the U.S. Nuclear Regulatory Commission's standards for protection against radiation.

1) NFS personnel have indicated that they could identify little applicable guidance for the design of the ventilation system except for ANSI/AIHA Z9.5-2003, "Laboratory Ventilation." However, NRC staff identified several potential sources of applicable guidance—including ASME AG-1-2003 "Code on Nuclear Air and Gas Treatment;" AGS-G007-2007 "Guideline for Gloveboxes;" DOE-HDBK-1169-2003 "DOE Nuclear Air Cleaning Handbook;" and ACGIH 2095 "Industrial Ventilation: A Manual of Recommended Practice for Design." Please justify the use of ANSI/AIHA Z9.5-2003 as being applicable for process gloveboxes and open process enclosures as opposed to operations in a laboratory setting. Also justify why ANSI/AIHA Z9.5-2003, which states it does not apply to radioisotope laboratories, would be considered acceptable guidance for ventilation design in a facility where uranium materials are the primary consideration.

2) Please verify that the ventilation system and high efficiency particulate air filters are not identified as items relied on for safety (IROFS). If these are IROFS, please identify the management measures that assure the function and reliability of the IROFS. Management measures may be satisfied by committing to be consistent with standards such as ASME AG-1 for design and operation of ventilation and filtration equipment that support licensed operations involving special nuclear material.

3) Justify why the design guidance found in AGS-G007-2007, DOE-HDBK-1169-2003, and ASME AG-1-2003 for nuclear gloveboxes (i.e., ventilation designed such that air flow through a breach in a normally sealed enclosure would be 125 +/- 25 lfm) is not applicable for NFS's gloveboxes.

4) In Section 3.2.2.1, first paragraph, please clarify what is meant by "measurement checks" in order to remove ambiguity regarding exactly what measurements will be performed.

5) In Section 3.2.2.2.2, last sentence, please clarify the statement, "these pressures are checked when used" in order to remove ambiguity regarding "when used."

6) In Section 3.2.2.2.2, a statement is made that implies the same design requirements established for high-enriched uranium will be used for plutonium operations. Please verify that only uranium (i.e., no plutonium) operations will be performed under this license.

7) In Section 3.2.2.2.2, it is stated that the minimum flow rates will be established by internal procedures. ANSI Z9.5-2003 provides a range of possible capture velocity flow rates depending on the hazard level. The only other commitment in the design of enclosure ventilation is the differential pressures established in this section. Please provide additional clarification as to what design criteria for capture velocity will be utilized.