



UNITED STATES
NUCLEAR REGULATORY COMMISSION

REGION II
SAM NUNN ATLANTA FEDERAL CENTER
61 FORSYTH STREET, SW, SUITE 23T85
ATLANTA, GEORGIA 30303-8931

January 23, 2006

Event Nos. 42131 and 42191

Mr. Kerry Schutt
President, General Manager
Nuclear Fuel Services Inc.
P. O. Box 337, MS 123
Erwin, TN 37650

SUBJECT: NRC INSPECTION REPORT NO. 70-143/2005-011

Dear Mr. Schutt:

This refers to the inspection conducted from November 13, 2005, through December 24, 2005, at your Erwin, Tennessee, facility. The purpose of the inspection was to determine whether activities authorized by the license were conducted safely and in accordance with NRC requirements. The results of the inspection are documented in the attached NRC Form 591, Parts 1, 2, and 3.

Areas examined during the inspection included the following: Plant Operations, Fire Protection, Radiation Protection, and Physical Protection. Within these areas, the inspection consisted of selective examinations of procedures and representative records, interviews with personnel, and observation of activities in progress.

Based on the results of this inspection, the NRC has determined that three Severity Level IV violations of NRC requirements occurred. These violations are being treated as Non-Cited Violations (NCVs), consistent with Section VI.A of the Enforcement Policy. These NCVs are described in the subject inspection report. If you contest the violation or significance of these NCVs, you should provide a response within 30 days of the date of this inspection report, with the basis for your denial, to the Nuclear Regulatory Commission, ATTN: Document Control Desk, Washington DC 20555-0001, with a copies to the Regional Administrator, Region II, the Director, Office of Enforcement, United States Nuclear Regulatory Commission, Washington, DC 20555-0001, and the NRC Senior Resident Inspector at the NFS facility.

By letter dated December 20, 2005, we received your supplemental reply to our Notice of Violation which was issued on September 19, 2005. By two separate letters dated January 13, 2006, we received your reply to our Notice of Violation which was issued on December 16, 2005. The replies met the requirements of 10 CFR 2.201 and your corrective actions will be reviewed during a future inspection.

K. Schutt

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[Redacted]

Should you have any questions concerning this letter, please contact us.

Sincerely,

/RA/

David A. Ayres, Chief
Fuel Facility Inspection Branch 1
Division of Fuel Facility Inspection

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

Enclosure: Form 591 Inspection Report, Parts 1, 2, and 3

cc w/encl:
B. Marie Moore
Vice President
Safety and Regulatory Management
Nuclear Fuel Services, Inc.
P. O. Box 337, MS 123
Erwin, TN 37650

Distribution w/encl:
D. Ayres, RII
B. Bonser, RII
W. Gloersen, RII
D. Rich, RII
G. Wertz, RII
J. Olivier, NMSS
K. Ramsey, NMSS
M. Lamastra, NMSS
B. Westreich, NSIR

PUBLICLY AVAILABLE NON-PUBLICLY AVAILABLE SENSITIVE NON-SENSITIVE

ADAMS: Yes ACCESSION NUMBER: _____

OFFICE	RII:DFFI	RII:DFFI	RII:DFFI				
SIGNATURE	/RA/						
NAME	D. Rich	S. Burris	W. Gloersen				
DATE	01/19/2005	5/ /2008	01/19/2006	5/ /2008	5/ /2008	5/ /2008	5/ /2008
E-MAIL COPY?	YES NO	YES NO	YES NO	YES NO	YES NO	YES NO	YES NO

OFFICIAL RECORD COPY DOCUMENT NAME: E:\Filenet\ML060230353.wpd

[Redacted]

SAFETY INSPECTION REPORT AND COMPLIANCE INSPECTION

1. LICENSEE/LOCATION INSPECTED: Nuclear Fuel Services, Inc. P. O. Box 337, MS 123 Erwin, TN 37650	2. NRC/REGIONAL OFFICE U.S. Nuclear Regulatory Commission Region II, Division of Fuel Facilities Inspection 61 Forsyth Street, Suite 23T85 Atlanta, GA 30303	
REPORT NUMBER(S)		
3. DOCKET NUMBER(S) <p style="text-align: center;">70-143</p>	4. LICENSEE NUMBER(S) <p style="text-align: center;">SNM-124</p>	5. DATE(S) OF INSPECTION <p style="text-align: center;">11/13/05 - 12/24/05</p>

LICENSEE:

The inspection was an examination of the activities conducted under your license as they relate to radiation safety and to compliance with the Nuclear Regulatory Commission (NRC) rules and regulations and the conditions of your license. The inspection consisted of selective examinations of procedures and representative records, interviews with personnel, and observations by the inspector. The inspection findings are as follows:

- 1. Based on the inspection findings, no violations were identified.
- 2. Previous violation(s) closed.
- 3. The violation(s), specifically described to you by the inspector as non-cited violations, are not being cited because they were self-identified, non-repetitive, and corrective action was or is being taken, and the remaining criteria in the NRC Enforcement Policy to exercise discretion were satisfied.

Three Non-Cited Violation(s) was/were discussed involving the following requirement(s) and Corrective Action(s):

NFS procedure SOP 401, part 8-3, Section 8.3.4, requires a leak test of certain components [REDACTED]. On November 17, the inspectors identified that the licensee failed to leak test these components when last required. The licensee exhibited initiative in identifying the circumstances and root cause of the events, and therefore, is granted identification credit for this event. Failure to perform a leak test was a violation of NRC requirements, NCV 70-143/2005-011-01. The licensee improved the test methodology, performed the required tests, and improved documentation to track tests due and tests completed.

NFS procedure GH-03, states supervisors have primary responsibility for RWP compliance, including posting at the RWP entrance. On December 10, the licensee identified that a job requiring an RWP, cleaning the [REDACTED] scrubber, had been started without an RWP being posted. Failure to post the RWP at the job site was a violation of NRC requirements, NCV 70-143/2005-011-02. Corrective actions included briefing all operations supervisors on RWP responsibilities.

NFS procedure CL-26, section 4.6.3, requires all containers to be closed while unattended. Contrary to the above, on November 17, a [REDACTED] was left open and unattended [REDACTED]. Failure to close an unattended container was a violation of NRC requirements, NCV 70-143/2005-011-03. Corrective actions included briefings with affected operators and supervisors and retraining on criticality safety requirements.

- 4. During this inspection certain of your activities, as described below and/or attached, were in violation of NRC requirements and are being cited. This form is a NOTICE OF VIOLATION, which may be subject to posting in accordance with 10 CFR 19.11.

(Violations and Corrective Actions)

Licensee's Statement of Corrective Actions for Item 4, above.

I hereby state that, within 30 days, the actions described by me to the inspector will be taken to correct the violations identified. This statement of corrective actions is made in accordance with the requirements of 10 CFR 2.201 (corrective steps already taken, corrective steps which will be taken, date when full compliance will be achieved). I understand that no further written response to NRC will be required, unless specifically requested.

Title	Printed Name	Signature	Date
LICENSEE'S REPRESENTATIVE			
NRC INSPECTOR	See Part 3		

**SAFETY INSPECTION REPORT
AND COMPLIANCE INSPECTION**

1. LICENSEE

**Nuclear Fuel Services, Inc.
P. O. Box 337, MS 123
Erwin, TN 37650**

2. NRC/REGIONAL OFFICE

**U.S. Nuclear Regulatory Commission
Region II, Division of Fuel Facilities Inspection
61 Forsyth Street, Suite 23T85
Atlanta, GA 30303**

REPORT NUMBER(S) **2005-011**

3. DOCKET NUMBER(S)

70-143

4. LICENSE NUMBER(S)

SNM-124

5. DATE(S) OF INSPECTION

11/13/05 - 12/24/05

SUPPLEMENTAL INSPECTION INFORMATION

(Continued)

5. Reported events reviewed

On November 9, NFS reported a violation of an environmental item relied on for safety, in that [REDACTED] of uranium had been added to a waste tank, while the limit was [REDACTED], (NRC Event 42131). This limit was based on environmental effects of a release. The site drainage system was modified since the original limit was calculated, and the licensee had analyzed the dilution resulting from the modifications and calculated the new limit to be [REDACTED]. The licensee implemented the new limit on November 10. The drainage modification had been made prior to the [REDACTED] limit being exceeded. Therefore, this failure constitutes a violation of minor significance and is not subject to formal enforcement action.

On December 8, the licensee reported a lost shipment of thorium (Th) [REDACTED], (NRC Event 42191). The shipment was subsequently found and the licensee retracted the report. However, the licensee identified that the [REDACTED] shipment exceeded the allowed 15 pound weight for the 10 CFR 40.22 general license documented on the shipping papers. Since the shipment was ultimately bound [REDACTED], the licensee claimed an oversight, that the shipping papers should have cited 10 CFR 100.22, which uses a [REDACTED] limit. Pending further NRC review, this is unresolved item (URI) 70-143/2005-011-04.

6. List of Items Opened, Closed, and Discussed

<u>Item Number</u>	<u>Status</u>	<u>Type</u>	<u>Description</u>
70-143/2005-011-01	Closed	NCV	Failure to perform required test
70-143/2005-011-02	Closed	NCV	Failure to post RWP
70-143/2005-011-03	Closed	NCV	Failure to close an unattended container
70-143/2005-011-04	Open	URI	Overweight Thorium Shipment
70-143/2005-011-05	Open	IFI	Potential over-pressurization [REDACTED]

7. Exit Meeting

The inspection scope and results were presented to members of the licensee management at various meetings throughout the inspection period and were summarized on December 19, 2005. No dissenting comments were received from the licensee.

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AND COMPLIANCE INSPECTION**

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SNM-124

5. DATE(S) OF INSPECTION

11/13/05 - 12/24/05

6. INSPECTOR(S): D. Rich, S. Burris

7. INSPECTION PROCEDURES USED: TI 2600/006; TI 2600/012

SUPPLEMENTAL INSPECTION INFORMATION

Executive Summary

This inspection included activities conducted by the resident inspectors during normal and off normal shifts in the areas of facility operations, fire protection, radiation protection, and physical protection. [REDACTED], Blended Low Enriched Uranium (BLEU) Preparation Facility (BPF), Oxide Conversion Building (OCB), and decommissioning processes were in operation.

Plant Operations

- The licensee identified that during a downblend operation, the in-line monitor failed but the process continued to run until an operator identified the failure. The in-line monitor was an item relied on for safety (IROFS) in the downblend system. However, the licensee had other IROFS in place to ensure a downblend accident could not occur, and met 10 CFR 70.61 performance criteria without the in-line monitor. Although not an NRC violation, this was a negative observation, in that a failure mode for an IROFS was not recognized in the design process.
- The licensee identified a criticality safety issue, in that a source of potential over-pressure in the product [REDACTED] [REDACTED] were not analyzed to ensure that no backflow into unfavorable geometry utilities could take place. Although the [REDACTED] were vented, a source of nitrogen was piped to the [REDACTED] and the effect of this pressure source was not previously considered. As temporary corrective action, the licensee isolated this pressure source from the [REDACTED] using lockout/tagout. Also, an analysis was initiated to determine the potential safety issues. Pending completion of this analysis, this issue will be tracked as inspection followup item (IFI) 70-143/2005-011-05.
- The following Temporary Instruction 2600/12 items were reviewed:

Information Notice 99-28, Supplement 1: Defective Star Sprinkler Heads manufactured from 1961 - 1976 may not operate properly. The licensee inspected all sprinkler heads in service and did not identify any heads meeting the criteria referenced in the Information Notice.

Information Notice 2000-07: Potential Cracking Aluminum Seamless and Composite Wrapped SCBA Cylinders for cylinders manufactured prior to 1988. The licensee reviewed all SCBA cylinder and found that all of their SCBA cylinders were manufactured after 1988 and did not match the DOT numbers of concern.

Information Notice 89-047: Failure of Retaining Hose Clamps on SCBA Breathing Hoses. The licensee performs a monthly inspection of these hose clamps as part of their monthly SCBA Inspection Program.

Executive Summary (continued)

Plant Operations (continued)

Information Notice 99-05: Personnel Safety Hazards and Operational Complications Associated with Inadvertent Carbon Dioxide Fire Suppression Systems. The licensee has reviewed their system and have determined that there are minimum hazards associated with the inadvertent discharge of the CO2 fire suppression system due to design and operational controls in place as identified in their fire safety hazard analysis.

Fire Protection

- Engineered fire prevention and mitigation systems were adequately maintained.

Radiation Protection

- Radiological control practices met regulatory requirements.

Physical Protection

- [REDACTED]