



UNITED STATES  
NUCLEAR REGULATORY COMMISSION

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

[REDACTED]

August 5, 2005

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

SUBJECT: NRC INSPECTION REPORT NO. 70-143/2005-04

Dear Mr. Schutt:

This refers to the inspection conducted from May 29, 2005, through July 9, 2005, at your Erwin facility. The purpose of the inspection was to determine whether activities authorized by the license were conducted safely and in accordance with NRC requirements.

Areas examined during the inspection included the following: Plant Operations, Fire Protection, Radiation Protection, Environmental Protection, Decommissioning, Transportation, 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 the inspection, no violations or deviations were identified.

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[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: NRC Inspection Report

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

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U. S. NUCLEAR REGULATORY COMMISSION

REGION II

Docket No.: 70-143

License No.: SNM-124

Report No.: 70-143/2005-04

Licensee: Nuclear Fuel Services, Inc.

Facility: Erwin Facility

Location: Erwin, TN 37650

Dates: May 29, 2005 - July 9, 2005

Inspectors: D. Rich, Senior Resident Inspector  
S. Burris, Resident Inspector  
W. Gloersen, Senior Fuel Facilities Inspector  
C. Taylor, Health Physicist

Approved by: D. Ayres, Chief  
Fuel Facility Inspection Branch 1  
Division of Fuel Facility Inspection

[REDACTED]

Enclosure



## EXECUTIVE SUMMARY

Nuclear Fuel Services, Inc.  
NRC Inspection Report 70-143/2005-04

This inspection included activities conducted by the resident inspectors and regional inspectors during normal and off normal shifts in the areas of facility operations, fire protection, environmental protection, decommissioning, transportation, and radiological protection.

### Plant Operations

- The plant was operated safely and generally in accordance with the license (Paragraph 2.a).
- Two issues were identified which related to failure to utilize or follow written, approved procedures. Both issues required further NRC review (Paragraph 2.b).

### Fire Protection

- Fire protection and detection equipment was adequately maintained. Fire hazards were minimized by appropriate housekeeping (Paragraph 3.a).



### Radiation Protection

- Radiological control practices met regulatory requirements. High Airborne conditions in the fuel production facility were evaluated to determine if operator doses were maintained As-Low-As-Reasonably-Achievable (Paragraph 4.a).

### Environmental Protection

- The licensee implemented the environmental monitoring program in accordance with license requirements. No new additional environmental contamination problems were noted (Paragraph 5.a).

### Decommissioning

- An independent verification survey was performed by the NRC contractor, Oak Ridge Institute for Science and Education (ORISE) at the North Site Decommissioning Area, Radiological Burial Grounds-5 (RBG-5), on June 7, 2005. In addition, results from three split samples collected by ORISE on March 22, 2005 were below the Derived Concentration Guidelines Levels (DCGL). (Paragraph 6.b).
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Transportation

- The designation of transportation authorities and responsibilities was adequate. Recent changes to the transportation organization involved promotions of selected staff. Management approved procedures that were established to carry out the various transportation activities at the facility were acceptable (Paragraph 7.a).
- Observed package preparation activities of the Oxide Package Transport Unit for the shipment [REDACTED] were adequate. Minor inconsistencies between the standard operation procedure for the Oxide Package Transport Unit and the operating and maintenance sections of the Safety Analysis Report were noted and adequately addressed. The licensee maintained current certificates of training in hazardous materials handling and regulations for selected staff (Paragraph 7.b).
- Employee knowledge of the regulations and procedures for the receipt of radioactive material packages was adequate. No problem areas were noted with the radiation and contamination survey records of incoming radioactive material shipments that were reviewed (Paragraph 7.c).
- The maintenance of NRC Certificates of Compliance for packages used to ship [REDACTED] material was adequate (Paragraph 7.d).

Physical Protection



Attachment:

- Partial List of Persons Contacted
- Inspection Procedures Used
- List of Items Opened, Closed, and Discussed.
- List of Acronyms



[REDACTED]

## REPORT DETAILS

### 1. Summary of Plant Status

The fuel manufacturing and scrap recovery processes operated throughout the reporting period. Blended low-enriched uranium (BLEU) downblending operations continued. BLEU oxide production operations were shutdown during the inspection period for periodic maintenance. Efforts continued in decommissioning older facilities on site. The processing, analysis, packaging, and shipments of contaminated soil and debris from the burial grounds continued and construction continued in several areas.

### 2. Plant Operations (Temporary Instruction (TI) 2600/006)

#### a. Routine Observations

#### (1) Scope and Observations

The inspector reviewed plant operations in progress during normal and off-normal operating shifts to evaluate plant safety and compliance with the license. The inspector made routine tours of the plant operating areas and determined that equipment and systems were operated safely and generally in compliance with the license. Some daily operational meetings were observed where production status and issues were discussed. The inspector verified the Emergency Control Center (ECC) and associated equipment were maintained in a state of readiness. The inspector reviewed selected licensee identified events and corrective actions for previously identified events and found no significant deficiencies in the items reviewed.

The inspector observed restart [REDACTED] after completion of significant repairs. Minor deficiencies were identified in the area of upgrading procedures to completely address modifications accomplished during the outage period, but no significant deficiencies were identified. The inspector also observed restart [REDACTED]. Equipment in this area was modified in order to address deficiencies identified during an event which was reported on April 29, 2005 (reference NRC non-cited violation (NCV) 70-143/2005-03-02 and violation (VIO) 70-143/2005-203-01). Each enclosure was [REDACTED]. These modifications adequately addressed the safety issues highlighted by the event. No deficiencies were observed during restart.

#### (2) Conclusions

The plant was operated safely and generally in accordance with the license.

[REDACTED]

b. Follow-up on Licensee Identified Issues

(1) Scope and Observations

Two licensee identified issues were reviewed to determine adequate licensee corrective action and identify additional NRC action.

- (a) On June 1, a licensee employee transferred [REDACTED] waste into a [REDACTED] storage area. The transfer necessitated the use of a temporary hose, since piping was not installed between the points. The operation apparently was not addressed by approved, written procedures. The issue was identified and investigated by the licensee, and documented as Problem Identification, Resolution and Corrective Action System (PIRCS) item 5267. This issue will be tracked as unresolved item (URI) 70-143/2005-04-01, pending further NRC review.
- (b) On June 22, an active radiological maintenance area was present [REDACTED]. This maintenance area was identified by radiation work permit (RWP) 05-04-032, which specified the precautions and personal protective equipment required for entry. The RWP specified that a full face negative pressure respirator was required until a high volume (HV) air sample had been performed to verify airborne contamination levels in the work area were within acceptable limits. The licensee identified that in spite of this posting, personnel had entered the area prior to the collection of the HV air sample and without utilizing a respirator. This issue was identified by the licensee and documented as PIRCS item 5396. This issue will be tracked as unresolved item (URI) 70-143/2005-04-02, pending further NRC review.

(2) Conclusions

Two issues were identified which related to failure to utilize or follow written, approved procedures. Both issues required further NRC review.

3. Fire Protection (TI 2600/06)

a. Routine Observations

(1) Scope and Observations

The inspector reviewed fire detection and protection systems in accordance with the license and additional licensee commitments. The inspector determined that fire protection and detection equipment was adequately maintained. Portable fire extinguishers were charged to the normal operating zones and no visible damage was noted. Fire hazards were minimized by appropriate housekeeping.



(2) Conclusions

Fire protection and detection equipment was adequately maintained. Fire hazards were minimized by appropriate housekeeping.

4. Radiation Protection (TI 2600/006)

a. Routine Observations

(1) Scope and Observations

The inspector reviewed radiation work permits, radiological surveys, radiological precautions, and general work practices in the process area and in decommissioning and construction areas to verify that work was conducted safely and in compliance with the license. During tours of the facility, the inspector noted that radiological signs, postings, and procedures were properly posted or readily available. The inspector determined that equipment and devices used to confine and contain radioactive contamination and airborne radioactivity were in proper working condition and that proper personal protective clothing and dosimetry were issued and properly worn. Radiological controls in process and decommissioning areas were adequate. During process area tours, the inspector noted that housekeeping was adequate and emergency egress routes were sufficiently clear of debris. The inspector observed response to off-normal events and, with the exception of the item noted below, noted the use of conservative radiological controls practices to confine contamination and to prevent unnecessary personnel exposure.

During the period from May 9 through May 20, the inspector noted several occurrences of high airborne contamination levels [REDACTED]. The licensee identified and corrected the source of the recurring high airborne condition, although this took several days due to intermittent operation of the various equipment involved. The licensee routinely monitored the production areas by stationary air sample cards, which were collected and counted at the end of each shift, excluding weekends. If the initial count observed from a certain station was above the investigatory limit, a HV sample was collected and counted. If the results from the HV count indicated a high airborne condition, then respiratory protection was utilized by any personnel who required access to the area. These procedures were adequately followed by the licensee, but due to the inherent time delay in detecting a high airborne condition, some exposure to employees resulted. The inspector reviewed the licensee's dose assessment and found eight employees were assigned doses of approximately 10 - 16 millirem (mRem). The licensee found the cause of the high airborne condition to be due to poor maintenance practices, where components of certain equipment were re-used in spite of being contaminated. This issue will be tracked as IFI 70-143/2005-04-03, pending further NRC review of As-Low-As-Reasonably-Achievable (ALARA) practices.

(2) Conclusions

Radiological control practices met regulatory requirements. High Airborne conditions in the fuel production facility were evaluated to determine if operator doses were maintained ALARA.

5. Environmental Protection (IP 88045)

a. Program/Procedure Changes, Internal Audits and Inspections, Quality Control of Analytical Measurements, Quality Control Records, Monitoring Stations, Monitoring Program Reports (IP 88045)

(1) Scope and Observations

The licensee's environmental program was reviewed to verify that commitments were met and the impact on the environment and the public was minimal. The inspector reviewed procedures for the collection of soil, sediment, vegetable, surface water, and environmental air station samples. The inspector also reviewed the procedures for the chain of custody for the samples. The procedures provided proper guidance for the collection and control of these environmental samples.

The inspector reviewed the licensee's analytical reports for the environmental program. Monitoring results for thermoluminescent dosimeters, soil, sediment, and vegetation for calendar year (CY) 2004 were reviewed to assess the radiological impact to the environment due to plant operations. The inspector observed the collection of the weekly sample media from the air monitors. The inspector observed the condition of selected environmental monitoring locations around the perimeter of the facility. No significant problems were noted. Also, the inspector reviewed the surface water results for CY 2005 to date. For the samples selected, the inspector determined that the licensee's environmental samples were collected at the required frequency and the activity levels were below the action levels with one exception, which was discussed in section 5.b of this report.

The inspector also reviewed selected portions of the 2004 quarterly audits and the first quarter of 2005 environmental protection program. These audits were performed by the Environmental Health and Safety staff. The inspector noted that the quarterly audits were of sufficient depth and appropriately targeted. The audit findings and recommendations were documented, assigned, and tracked to completion.

The inspector determined from reviewing PIRCS that there were no unusual incident reports pertaining to environmental protection and waste generation for the period February 2004 to May 2005 that required notification to the NRC. The inspector specifically reviewed PIRCS item 2249 regarding leaks at the Waste Water Treatment

[REDACTED]

Facility (WWTF). The inspector toured the WWTF and determined that the leaks identified in the problem report had been corrected and appropriate surveys conducted.

(2) Conclusion

The licensee implemented the environmental monitoring program in accordance with license requirements. No additional environmental contamination problems were noted.

b. Follow-up on Previously Identified Issues

(Discussed) Inspection Followup Item (IFI) 70-143/2005-03-04: Elevated isotopic analysis on a stack sample above the licensee's action limit. This issue concerned an elevated result on a stack sample above the licensee's action limit on May 2, 2005. The licensee identified an elevated stack sample result [REDACTED]. The reading was above the plant action limits of 130 disintegrations per minute (dpm) for alpha and 5,000 dpm for beta. During the inspection the licensee had not received the results from an outside lab for the isotopic analysis. The licensee had initiated an investigation but was unable to state how much material might have been vented out the stack. Although the licensee believed the ventilation system was shutdown for a period of approximately one week, no record of operation or shutdown was available. The licensee was unable to show that the system was locked and tagged out. In this case, the system should have been shut down due to an alarm condition, then maintained in a shutdown condition for maintenance. However, since the system normally operated continuously and no system isolation or lockout was utilized, the inspector questioned how the licensee maintained control over the system. This item will remain open pending further evaluation of the operational status of the system and also pending receipt of isotopic analysis of the sample.

6. Decommissioning (IP 88104)

a. Scope and Observations

The inspector accompanied NRC's contractor, the Oak Ridge Institute for Science and Education (ORISE), and plant personnel to witness the performance of independent verifications scans and the collection of several soil samples from randomly selected areas of the North Site's west end boundary for final status surveys of the Radiological Burial Ground (RBG)-5 area. The sampled area's dimensions were 40 ft X 30 ft X 17 ft deep. At the conclusion of this inspection period, results from the soil sample analyses were not yet available.

In March 2005, the licensee split three soil samples with the NRC from the same area, RBG-5. The samples were analyzed for selected gamma emitting radionuclides by gamma spectroscopy. The Derived Concentration Guidelines Level (DCGL) values along with the data results are presented in Table 1.

[REDACTED]

Table 1. Comparison of Radionuclides to the Derived Concentration Guidelines Levels for North Site, RBG-5 at Nuclear Fuel Services

Nuclide	U-238 (pCi/g)		U-235 (pCi/g)		Th-232 (pCi/g)		Am-241 (pCi/g)	
DCGL	306		74		3.7		130	
Facility	ORISE	NFS	ORISE	NFS	ORISE	NFS	ORISE	NFS
Sample ID								
05696	1.80	7.88	0.09	0.09	1.15	1.37	0.01	< MDC <sup>2</sup>
05698	1.72	4.7	< MDC <sup>1</sup>	< MDC <sup>2</sup>	3.27	2.91	0.06	< MDC <sup>2</sup>
05700	1.96	1.79	0.12	0.25	1.42	1.64	0.04	< MDC <sup>2</sup>

<sup>1</sup> The average minimum detectable concentrations (MDCs) for these radionuclides range from 0.06 pCi/g for Am-241; 0.10 pCi/g for Th-232 by Ac-228; 0.17 pCi/g for U-235; and 0.53 pCi/g for U-238 by Th-234 (as determined by ORISE)

<sup>2</sup> The average MDCs for these radionuclides range from 0.13 pCi/g for U-238 to 0.73 pCi/g for Am-241 (as determined by NFS)

b. Conclusions

An independent verification survey was performed by NRC contractor, ORISE, in the RBG-5 area, North Site on 6/7/05. In addition, results from three split samples collected by ORISE on 3/22/05 were below the Derived Concentration Guidelines Levels.

7. Transportation (IP 86740)

a. Management Controls

(1) Inspection Scope and Observations

The inspector discussed with staff involved in the transportation of radioactive materials the changes that occurred in the organization since the last inspection. The inspector noted that the Transportation and Waste Manager had been promoted to Site Services Manager. The Transportation and Waste Manager position had been filled by an individual from within the organization. The inspector verified that transportation authorities and responsibilities were delineated among individuals and designated in writing.

The inspector also verified that written management approved procedures were established to carry out the various transportation activities at the facility, including package preparation, delivery of completed packages to carriers, and receipt of packages. The inspector verified that changes to procedures were approved by licensee management.

(2) Conclusions

The designation of transportation authorities and responsibilities was adequate. Recent changes to the transportation organization involved promotions of selected staff.

Management approved procedures that were established to carry out the various transportation activities at the facility were acceptable.

b. Preparation and Delivery of Completed Packages for Shipment

(1) Inspection Scope and Observations

The inspector reviewed selected portions of the following procedures pertaining to the shipment of radioactive materials:

- SOP 401, Section 33, Labeling and Packaging [REDACTED] for Shipment, Revision 13, April 5, 2005
- SOP 500, Section 21, [REDACTED] Shipping, Revision 1, May 19, 2005
- SOP 520, Section 8, [REDACTED] Operations, Revision 9, June 13, 2005
- SOP 520, Section 23, Shipping Coordination and Documentation, Marking, and Labeling Requirements for Shipments [REDACTED], Revision 7, May 19, 2005
- NFS-ACC-33, Shipping Procedure for Nuclear Material, Revision 31, June 15, 2005
- NFS-WST-004, Completion of the Bill of Lading for Radioactive Material Shipments, Revision 3, June 30, 2005

As the situation allowed, the inspector observed actual transport operations and package preparation activities using the appropriate sections of the standard operating procedures noted above. Specifically, the inspector observed loading operations involving the Oxide Package Transport Unit (OPTU). The inspector noted that the outer flange gasket on several OPTUs were cracked and dried along the outer edge of the gasket. Upon further examination, it was noted that the inner sealing surface of the outer flange lid gasket was in acceptable condition without noticeable cracking. The licensee had indicated that these OPTUs had been in service for approximately one year. The inspector observed package loading personnel inspect the outer flange lid gaskets for cracking before loading [REDACTED] into the OPTU. SOP 520, Section 8 did not provide a means to document this inspection.

The inspector also observed a fully loaded OPTU container (Serial Number OP-TU-06) with a lock washer missing on one of the [REDACTED] hex bolts of one of the outer lid assemblies securing the [REDACTED]. The licensee immediately corrected the problem by correctly adding the lock washer. The inspector noted that SOP 520, Section 8, Step 6.7.8, only specified a bolt and washer into each outer lid assembly hole. Figure OP-TU-SAR, Sheet 1 of 2, Revision 8 of the Safety Analysis Report (SAR) specified [REDACTED] hex bolt, lock washer and washer for each outer lid assembly hole. The licensee agreed to review SOP 520, Section 8 so that the SAR operating and maintenance requirements

[REDACTED]

are appropriately specified. No other problem areas were noted with [REDACTED] package preparation activities.

The inspector also reviewed the shipping paper work for limited quantity, [REDACTED] shipments using the OPTU, LR-230, UNH Tanker Trailer, and DOT Specification 6L shipping containers for selected shipments made from April - June 2005. The licensee prepared the required shipping paper documentation and accurately included the applicable required elements of information.

The inspector verified that selected individuals involved in the packaging, preparation and transport of hazardous materials received the appropriate required training. The inspector examined the certificates of training for hazardous material handling for DOT 49 CFR transportation regulations and for the packaging and transportation of radioactive materials. The certifications were current and no problems were noted.

(2) Conclusions

Observed package preparation activities of the Oxide Package Transport Unit for the shipment of [REDACTED] were adequate. Minor inconsistencies between the standard operation procedure for the Oxide Package Transport Unit and the operating and maintenance sections of the Safety Analysis Report were noted and adequately addressed. The licensee maintained current certificates of training in hazardous materials handling and regulations for selected staff.

c. Receipt of Packages

(1) Inspection Scope and Observations

The inspector discussed with the employees involved in transportation the requirements for the receipt of radioactive material packages and noted they were knowledgeable of requirements and procedures for unloading vehicles and receiving radioactive material packages. The inspector interviewed several licensee personnel to verify their knowledge of radioactive material receipt requirements.

The inspector also reviewed selected radiation and contamination survey records of incoming radioactive material shipments to verify that the surveys were performed in accordance with the requirements specified in 10 CFR 20.1906. The receipt records reviewed included low enriched uranium (LEU) received by the BLEU facility and high enriched uranium (HEU) received by the NFS facility. No problem areas were noted with the surveys.

The inspector reviewed SOP 500, Section 1, Uranyl Nitrate Trailer Receiving, Revision 6, May 19, 2005, which was the radioactive material receipt procedure for the Eco-Pak Liqui-Rad (LR) transport Package (Model No. LR-230). The inspector also reviewed the Safety Analysis Report (SAR), Section 7.1 for the LR-230 and compared the package receipt requirements to the appropriate section in SOP 500. The inspector discussed the flow-down of the package receipt requirements specified in the SAR into SOP 500 with [REDACTED]

licensee representatives who agreed to review the SAR requirements to ensure that the SOP incorporated the operational and handling requirements specified in the SAR.

(2) Conclusions

Employee knowledge of the regulations and procedures for the receipt of radioactive material packages was adequate. No problem areas were noted with the radiation and contamination survey records of incoming radioactive material shipments that were reviewed.

d. Certificates of Compliance

(1) Inspection Scope and Observations

The inspector noted that NFS can use the following radioactive material transport packages to make shipments under the general license in Subpart C of 10 CFR 71:

- CHT-OP-TU (CoC 9288)
- Eco-Pak Liqui-Rad (LR 230) Transport Unit Package (CoC 9291)
- NFS Uranyl Nitrate Tank Trailer (CoC 5059)
- Super Tiger (CoC 6400)
- DOT Specification 6L
- DOT Specification 7A and 1A2 steel drums

The inspector noted the following regarding the above NRC CoC packages. The CHT-OP-TU package is used by the licensee to ship blended low enriched uranium product. Currently, the licensee only receives uranyl nitrate solution at the BLEU complex in the LR-230 package and does not use this package for liquid radioactive material shipments. The Model 6400 Super Tiger package had not been used for approximately ten years. NFS owns three Model No. 6400 packagings. The certificate holder is Westinghouse Electric Company. The inspector observed the condition of the three NFS-owned packagings in the yard of the NFS site and noted that the packagings would require some repair and refurbishment before use. The NFS Uranyl Nitrate Tank Trailer is currently being used to ship natural uranyl nitrate [REDACTED]. Since the Uranyl Nitrate Tank Trailer shipments involved [REDACTED], the licensee made these shipments under DOT authority.

The inspector verified that the licensee maintained current the following NRC Certificates of Compliance for packagings currently used at the facility:

- CoC 5059, USA/5059/AF, NFS Uranyl Nitrate Tank Trailer
- CoC 9288, USA/9288/B(U) F-85, CHT-OP-TU
- CoC 9291, USA/9291/B(U) F-85, Eco-Pak Liqui-Rad (LR 230) Transport Unit Package

The inspector also verified that the licensee had registered with NRC as a user of the NRC-certified packages that are currently being used to ship radioactive materials and

[REDACTED]

had a quality assurance program approval issued by NRC (Quality Assurance Program for Shipping Packages for Radioactive Material," Revision 9, dated May 16, 2003).

(2). Conclusions

The licensee's maintenance of NRC Certificates of Compliance for packages used to ship [REDACTED] material was adequate.

8. Physical Protection (TI 2600/006)

■ [REDACTED]

■ [REDACTED]

[REDACTED]

■ [REDACTED]

[REDACTED]

9. 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 July 13, 2005. No dissenting comments were received from the licensee.

[REDACTED]





**1. PERSONS CONTACTED**

Partial List of Licensee's Persons Contacted

- G. Athon, Vice President Fuel Development
- S. Barron, Emergency Preparedness Manager
- R. Droke, NFS Licensing & Compliance Director/Acting Safety Director
- P. Johnson, Vice President, Applied Technology
- N. Kenner, Training Manager
- M. Moore, Vice President, Safety and Regulatory
- J. Nagy, Senior Licensing & Regulatory Compliance Officer
- D. Paine, Vice President, BPF
- J. Parker, Industrial Safety Manager
- J. Pugh, Site Services Director
- K. Schutt, President and General Manager
- R. Shackelford, Nuclear Criticality Safety Manager
- T. Sheehan, HEU Operations Director
- M. Shope, Quality Engineering Supervisor
- J. Stout, Security Director
- M. Tester, Sr. Manager, Radiation Control
- A. Vaughan, Director, Fuel Production
- A. Ward, General Counsel
- D. Wise, Vice President, Fuel Production

Other Persons Contacted

- T. Finan, KAPL Resident

**2. INSPECTION PROCEDURES USED**

- TI 2600/006 Safety Operations, Safeguards, Radiological Controls & Facility Support
- IP 86740 Transportation
- IP 88045 Environmental Protection
- IP 88104 Decommissioning

**3. LIST OF ITEMS OPENED, CLOSED, AND DISCUSSED**

<u>Item Number</u>	<u>Status</u>	<u>Type</u>	<u>Description</u>
70-143/2005-04-01	Open	URI	Waste Transfer without procedural authorization.
70-143/2005-04-02	Open	URI	Failure to utilize required respiratory protection.



70-143/2005-04-03	Open	IFI	Poor maintenance practices resulted in increased exposure.
70-143/2005-03-04	Discussed	IFI	Elevated Isotopic Analysis on a Stack Sample Above the Licensee's Action Limit.

#### 4. LIST OF ACRONYMS USED

ALARA	As Low As Reasonably Achievable
Am-241	Americium 241
BLEU	Blended Low Enriched Uranium
BPF	BLEU Preparation Facility
CoC	Certificate of Compliance
CY	Calendar Year
DCGL	Derived Concentration Guidelines Level
CFR	Code of Federal Regulations
DOT	Department of Transportation
ECC	Emergency Control Center
H <sub>2</sub>	Hydrogen
HV	High Volume
HEU	High Enriched Uranium
IFI	Inspection Followup Item
IP	Inspection Procedure
LR	Liqui-Rad
LEU	Low Enriched Uranium
MDC	Minimum Detectable Concentration
mrem	Millirem
NCV	Non-Cited Violation
NFS	Nuclear Fuel Services
NRC	Nuclear Regulatory Commission
pci/gm	picocuries per gram
OPTU	Oxide Package Transport Unit
ORISE	Oak Ridge Institute for Science and Engineering
PIRCS	Problem Identification, Resolution and Corrective Action System
RBG	Radiological Burial Grounds-5
RWP	Radiation Work Permit
SAR	Safety Analysis Report
SRS	Savannah River Site
SOP	Standard Operating Procedure
Th-232	Thorium - 232
U-235	Uranium - 235
U-238	Uranium - 238
URI	Unresolved Item
VIO	Violation
WWTF	Waste Water Treatment Facility