



UNITED STATES
NUCLEAR REGULATORY COMMISSION

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

August 25, 2006

NMED No. 040049
Mr. J. D. Fuller
Chief Executive Officer and Facility Manager
Global Nuclear Fuel - Americas, L.L.C.
P. O. Box 780
Wilmington, NC 28402

SUBJECT: NRC INSPECTION REPORT NO. 70-1113/2006-005 AND NOTICE OF VIOLATION

Dear Mr. Fuller:

This refers to the results of the above-referenced Nuclear Regulatory Commission (NRC) inspection conducted at your Wilmington facility on July 24 through July 28, 2006.

As a result of the inspection, the enclosed NRC Forms 591FF, SAFETY INSPECTION REPORT, is being issued. The enclosed forms indicate that one violation was identified during the inspection of your licensed activities. The violation is cited in Part 2 of the 591FF, SAFETY INSPECTION REPORT. The violation was the result of your staff's inattentive action to certificate of compliance requirements for NRC certified shipping packages. This violation was evaluated in accordance with the "General Statement of Policy and Procedure for NRC Enforcement Actions," NUREG-1600, which is included on the NRC's web site at <http://www.nrc.gov/what-we-do/regulatory/enforcement.html>. During the inspection, the inspector reviewed your corrective actions and no further response to the violation is needed. This matter is considered closed.

Since the NRC has already closed this matter, it is neither requested nor required that Part 1 of the enclosed NRC Form 591FF be signed by a Global Nuclear Fuel representative. Please retain this form in your files. Should you have any questions, we shall be pleased to discuss them with you.

In accordance with 10 CFR 2.390 of the NRC's "Rules of Practice," a copy of this letter and its enclosure will be made available electronically for public inspection in the NRC Public Document Room or from the NRC's document system (ADAMS), accessible from the NRC Web site at <http://www.nrc.gov/reading-rm/adams.html>.

J. D. Fuller

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Thank you for your cooperation. If you have any questions, please call me at (404) 562-4731.

Sincerely,

Deborah Seymour for */RA/*

Jay L. Henson, Chief
Fuel Facility Inspection Branch 2
Division of Fuel Facility Inspection

Docket No. 70-1113
License No. SNM-1097

Enclosures: NRC Form 591FF Parts 1, 2, and 3

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ADAMS: X Yes ACCESSION NUMBER: _____

OFFICE	RII:DFFI	RII:DFFI					
SIGNATURE							
NAME	CTaylor						
DATE	08/24/2006	8/ /2006	8/ /2006	8/ /2006	8/ /2006	8/ /2006	8/ /2006
E-MAIL COPY?	YES NO	YES NO	YES NO	YES NO	YES NO	YES NO	YES NO

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DOCUMENT NAME: E:\Filenet\ML062370154.wpd

SAFETY INSPECTION REPORT AND COMPLIANCE INSPECTION

1. LICENSEE/LOCATION INSPECTED:

Global Nuclear Fuels - Americas, L.L.C.
P. O. Box 780
Wilmington, NC 28402

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 70-1113/2006-001

3. DOCKET NUMBER(S)

70-1113

4. LICENSEE NUMBER(S)

SNM-1097

5. DATE(S) OF INSPECTION

July 24 through July 28, 2006

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. See list of items opened and closed on NRC Form 591FF Part 3.
- ☐ 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.

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

- ☒ 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.

SEE PART 2 OF THE REPORT

(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	Not Applicable	Not Applicable	
NRC INSPECTOR	Cynthia Taylor		

**SAFETY INSPECTION REPORT
AND COMPLIANCE INSPECTION**

1. LICENSEE

Global Nuclear Fuels - Americas, L.L.C.
P. O. Box 780
Wilmington, NC 28402

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) 70-1113/2006-005

3. DOCKET NUMBER(S)

70-1113

4. LICENSE NUMBER(S)

SNM-1097

5. DATE(S) OF INSPECTION

July 24 through July 28, 2006

SUPPLEMENTAL INSPECTION INFORMATION

10 CFR 71.17(c)(2) requires the licensee to comply with the terms and conditions of the license, certificate, or other approval, as applicable, and the applicable requirements of Subparts A, G, and H of 10 CFR 71.

Condition 6(a) of Certificate of Compliance (CoC) 9309 for the model RAJ-II package requires the package to be prepared for shipment and operated in accordance with the operating procedures of Chapter 7, "Package Operations," of the license application. Chapter 7, Section 7.1.2.3, Item 11, states "Put on hold down clamps and tighten bolts," and Item 13 states, "Install tamper-indicating devices on the outer container ends."

Contrary to the above,

1. On November 30, 2005, and January 20, 2006, the licensee failed to comply with the terms and conditions of NRC CoC 9309 by not ensuring that all four hold down clamps bolts were tightened before shipping a RAJ-II container to a customer. On both occasions, the customer notified the licensee after finding that one out of four hold down clamp bolts was loose on the RAJ-II container during package unloading.
2. On December 29, 2005, the licensee failed to comply with the terms and conditions of NRC CoC 9309 by not adequately installing tamper-indicating device (tamper-safe seal) on the outer container ends. A tamper-safe seal was not installed on one container end, and the tamper-safe seal was improperly installed on the other container end. The customer notified the licensee after finding one of the two outer tamper-safe seals inside the outer container. Also, the installation of the other tamper-safe seal allowed the outer container lid to be lifted without damaging the tamper-safe seal.

Corrective Actions

Upon notification, the licensee suspended all fuel assembly packaging operations and inspected the tamper-safe seals on loaded packages. The checklist used during packaging activities to require verification of the installation was revised. In addition, a new checklist was also developed for use in the shipping department as an independent check of proper installation of the tamper-safe seals. Additional training was conducted for applicable employees to make them aware of the event and emphasize procedural compliance. During the inspection, the inspector was able to verify corrective actions by reviewing the revised procedure and checklist, conducting interviews of packaging operators and transportation specialists and observing packaging of the RAJ-II container. The violation (VIO 070113/2006-00501) is considered closed.

SAFETY INSPECTION REPORT AND COMPLIANCE INSPECTION

1. LICENSEE

Global Nuclear Fuels - Americas, L.L.C.
P. O. Box 780
Wilmington, NC 28402

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):

70-1113

4. LICENSE NUMBER(S):

SNM-1097

5. DATE(S) OF INSPECTION:

July 24 through July 28, 2006

6. INSPECTOR(S): Cynthia Taylor

7. INSPECTION PROCEDURES USED: **86740** (Transportation) and **88005** (Management Controls and Organization)

SUPPLEMENTAL INSPECTION INFORMATION

Executive Summary

The Global facility fabricates low-enriched uranium fuel for use in commercial reactors. During the period of the inspection, all operations were normal.

This was a routine, announced inspection that included observations and evaluation of the transportation and management organization and control program. All areas were reviewed per transportation and management control and organization procedures. The inspection involved observations of work activities, reviews of selected records, and interviews with plant personnel. The inspection identified the following aspects of the licensee programs as outlined below:

Transportation

- Records pertaining to shipments of special nuclear material were appropriately completed and maintained. Selected shipping personnel were appropriately trained in the handling and shipment of hazardous materials.
- The maintenance activities as described in NRC CoC packages used to ship fissile material was adequate.
- The process of performing audits of the RAJ-II package vendor and inspections of the RAJ-II packages before package acceptance was thorough and detailed. The management of the records pertaining to package fabrication and certification was well organized and maintained.
- The system for promptly reporting incidents and deficiencies to management and regulatory authorities was effective. Root cause determinations were performed in a prompt manner.
- Two examples of a violation (VIO 07-1113/2006-05-01) for failure to package fuel in accordance with the requirements of the Certificate of Compliance were identified.

Management Organizations and Controls

- The management changes met the license requirements for education and experience of personnel assigned those positions. The process for approving procedures complied with the license application requirements. Selected staff interviewed during the inspection were knowledgeable of significant procedure changes.
- Selected change requests concerning systems repairs and maintenance were reviewed. The changes made were approved by the appropriate management function in accordance with the licensee's configuration management system and license requirements. The licensee continues to migrate and centralize procedures into a new tracking and integrated training system, "CM-Track."
- Transportation and annual radiation protection reviews, preventative maintenance assessments, and safety audits were acceptable and were implemented in an effective and timely manner.
- The licensee's implementation of the Safety Review Committee was adequate. The committee met at the required frequency and the attendance met license requirements.
- The licensee's response to Information Notices (INs) 86-077, 87-033 and 89-003 (see titles below) were reviewed in accordance with Temporary Instruction (TI) 2600/12 "Institutionalizing Concerns Regarding Safety Issues Identified In Selected Past Generic Communications."
- 10 CFR Part 71, Subpart H, Quality Assurance audit was conducted by appropriately qualified personnel and in accordance with license requirements. Audit findings were detailed and corrective actions were either completed or in the process of being completed.

Follow-up Items:

Temporary Instruction 2600/012 : Institutionalizing Concern Regarding Safety Issues Identified in selected Past Generic Communications

- **IN-86-077, "Mechanisms for Identifying Computer Programs Errors for Safety-Related Design Activities"**: The licensee had approved QA procedures that defined and discussed requirements for acquisition of software products or computer services.
- **IN-89-003, "Electrical Equipment Problems Caused by Inadequate Maintenance, Equipment Defects"**: The licensee gave an overview and examples of their maintenance process and supply acquisition process. The program verified that equipment or parts purchased for the facility met the manufacturer standards and the licensee's safety standards. The licensee had established an effective preventive maintenance program.
- **IN-87-033, "Contractors Compliance with 10 CFR 21 Notifications Requirements for Safety-Related Equipment"**: The inspector reviewed the licensee's policy for contractors. The information (i.e. vendors list, contracts) reviewed by the inspector was in compliance with the requirements set forth in the information notice.

Events Reviewed

The inspectors reviewed NMED No. 040049 concerning an accident involving a tractor trailer hauling uranium hexafluoride (UF₆) cylinders to Global. The packages were consigned by CNEIC, China and had arrived by ocean vessel via Port of Vancouver, Canada and were moving by road to Global. On October 16, 2003, in Montana, the truck driver swerved for unknown reasons and lost control of the tractor trailer. There were four type 30 cylinders in Model UX-30 overpacks loaded on the 20 foot flat rack truck. None of the containers were damaged. One overpack suffered minor damage as a result of the flat rack corner post being pushed against its cover. Global dispatched personnel to the accident site to inspect the shipment. The Department of Transportation (DOT) was contacted and an assessment of damage was communicated to them. The DOT, in conjunction with the NRC, and using the conditions of the Certificate of Compliance, gave approval for the damaged over-pack to be transported to Global on October 21, 2003. There was no other damage reported once the cylinder arrived on site. Based on this review of the incident, this matter is considered closed.

Notice of Violation (Follow-up)

Violation 70-1113/2005-03-01) involved the licensee's failure to remove cylinder valve covers on 30B UF₆ cylinders prior to shipment to a customer, as required by NRC CoC No. 9196.

The inspector reviewed the corrective actions taken by the licensee. Those actions included suspension of all fuel assemblies packing operations for inspection of other container. The licensee updated a checklist used during the loading activities and a new checklist was developed for the shipping department for independent verification. In addition, remedial training was conducted for all applicable employees. The violation (VIO) 70-1113/2005-03-01) is considered closed.

Items Opened, Closed, And Discussed

<u>Item</u>	<u>Status</u>	<u>Description</u>
NMED 040049	Closed	Accident involving tractor trailer hauling UF ₆ cylinders to GNF-A
70-1113/2005-03-01	Closed	VIO Failure to comply with the terms and conditions of NRC CoC No. 9196
70-1113/2006-05-01	Open/Closed	VIO Failure to comply with the terms and conditions of NRC CoC No. 9309