



UNITED STATES
NUCLEAR REGULATORY COMMISSION

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

August 10, 2006

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. 70-1113/2006-004

Dear Mr. Fuller:

This refers to the results of the above-referenced Nuclear Regulatory Commission (NRC) inspection conducted at your Wilmington, North Carolina facility on July 10-14, 2006.

As a result of the inspection, the enclosed NRC Form 591FF, SAFETY INSPECTION, is being issued. The enclosed form indicates that no violations were identified during the above described inspection of your licensed activities. Please retain the form in your files. No acknowledgment of this letter is required. However, 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>.

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

Sincerely,

/RA/ D. Hartland for

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

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

Enclosure: NRC Form 591FF Parts 1 and 3

cc w/encl: (See page 2)

J. D. Fuller

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cc w/encl:
Charles M. Vaughan, Manager
Facility Licensing
Global Nuclear Fuel - Americas, L.L.C.
P. O. Box 780, Mail Code J26
Wilmington, NC 28402

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Health & Natural Resources
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PUBLIC

***see previous concurrence**

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☐ NON-PUBLICLY AVAILABLE

☐ SENSITIVE

☒ NON-SENSITIVE

ADAMS: X Yes ACCESSION NUMBER: _____

OFFICE	RII:DFFI	RII:DFFI					
SIGNATURE	WG 8/4/06	JP 8/7/06					
NAME	WGloersen*	JPelcat*					
DATE	8/ /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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NRC FORM 591FF PART 1

(11-2005)
10 CFR 2.201

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 70-1113/2006-004			
3. DOCKET NUMBER(S) 70-1113	4. LICENSEE NUMBER(S) SNM-1097	5. DATE(S) OF INSPECTION July 10-14, 2006	

LICENSEE: Global Nuclear Fuels - Americas, L.L.C.

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.

(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	Not Applicable
NRC INSPECTOR	William B. Gloersen	/RA/	8/7/06

**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): **70-1113/2006-004**

3. DOCKET NUMBER(S):

70-1113

4. LICENSE NUMBER(S):

SNM-1097

5. DATE(S) OF INSPECTION:

July 10-14, 2006

6. INSPECTOR(S): William B. Gloersen; John Pelchat (accompanying inspector)

7. INSPECTION PROCEDURES USED: 88035; 88045; 84850; 84900

SUPPLEMENTAL INSPECTION INFORMATION

Executive Summary

The Global Nuclear Fuels 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 environmental protection, radioactive waste management, low-level radioactive waste storage, and radioactive waste generator requirements programs. 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:

Environmental Protection

- The inspectors verified that no significant environmental program or procedure changes occurred since the last inspection. Internal audits were adequate. Soil, surface water, river sediment, and vegetation samples were being properly monitored, analyzed, and evaluated. The environmental monitoring program was being implemented in accordance with license requirements. Measurement procedures and sample chain-of-custody requirements were adequate. Procedures for the collection of air, soil, surface water, river sediment, vegetation, and fallout samples were sufficiently detailed.
- Inspectors observed during collection of sample filters at five of six ambient air sample stations that the buildup of particulates on the filters was lighter than expected. Examination of the air samplers revealed that the filters had been placed off-center on the sampling head, allowing a portion of the air being drawn through the sampling system to bypass the sample filter. The licensee took prompt and thorough corrective action to retrain staff involved in air sampling. The inspectors determined that safety significance was minor as dose from airborne effluents was historically well below regulatory limits.

Radioactive Waste Management

- The liquid and airborne effluent management program effectively maintained effluent concentrations well below the limits specified in the license application and 10 CFR Part 20. The total dose from airborne effluents for calendar year 2005 was approximately 0.05 mrem which was well below the regulatory constraint limit of 10 mrem/year. The inspectors verified that no significant changes occurred since the last inspection for the airborne stack sampling systems, outfall sampling stations, and radioactive waste management program.
- The As Low As Reasonably Achievable Program for controlling liquid and airborne releases was effective. In response to exceeding the action levels for uranium for the process lagoon effluent, the licensee initiated a root cause investigation and implemented effective corrective actions to reduce the uranium concentrations in the liquid effluent streams from the facility. Similarly, the licensee noted a gradually increasing trend in the quantities of uranium in the airborne effluent during the past three years. In response, the licensee performed an investigation, determined that the cause was due to loading of the secondary HEPA filters, and subsequently initiated action to change out the secondary filters.

Low-Level Radioactive Waste Storage

- The total population of radioactive material containers had not changed significantly from the previous 12 months. However, the data indicated that the generation of radioactive materials was decreasing in 2006 and that the quantities of radioactive material being shipped to a foreign facility for uranium recovery was increasing, with an anticipated net effect of a volume reduction on the storage pads. The non-recoverable waste and recoverable scrap containers stored on the outside storage pads were in an acceptable condition to contain the licensed material, properly labeled, and adequately secured.

Radioactive Waste Generator Requirements

- Shipment records for solid waste disposal to licensed waste burial facilities were acceptable for determining radioactive nuclide quantities. Shipping manifests were complete and met the requirements of 10 CFR 20 and 61. Procedures were adequate to track waste shipments. Plant staff was cognizant of disposal site license conditions.
- Adequate management controls including training, procedures, and audits were maintained to ensure compliance with the requirements of Appendix G of 10 CFR Part 20, 10 CFR 61.55, and 10 CFR 61.56.