



**Global Nuclear Fuel**

A Joint Venture of GE, Toshiba, & Hitachi

**Global Nuclear Fuel**

**Scott P. Murray**

Manager, Licensing & Liabilities

3901 Castle Hayne Road  
P.O. Box 780  
Wilmington, NC 28402  
USA

(910) 819-5950  
(910) 362-5950  
scott.murray@ge.com

SPM 11-039

August 26, 2011

Director, Office of Nuclear Material Safety and Safeguards  
U.S. Nuclear Regulatory Commission  
Attn: Document Control Desk  
Washington, DC 20555-0001

Subject: Semi-Annual Effluent Monitoring Report

References: 1) NRC License SNM-1097, Docket 70-1113  
2) NRC Regulation 10CFR70.59

Dear Sir or Madam:

With respect to activities authorized by NRC License SNM-1097, the Global Nuclear Fuel-Americas, L.L.C. (GNF-A) facility in Wilmington, North Carolina hereby submits the semi-annual effluent monitoring report required by 10CFR70.59 for the time period of January through June 2011.

If you have any questions regarding this matter, please contact me at (910) 819-5950.

Sincerely,

A handwritten signature in black ink, appearing to read 'Scott Murray', followed by the word 'For'.

Scott Murray, Manager  
Licensing & Liabilities

Commitments: None

Attachment

cc: SPM-11-039  
Regional Administrator, USNRC, RII  
Lee Cox, NCDENR  
Mark Poirier, ANI  
Mary Thomas, NRC-Region II  
M.N. Baker, NRC-HQ

bcc:

N. Holmes  
A. Vexler  
M. Short  
A. Hilton  
M. Campbell  
J. Degolyer  
A. Mabry  
C. Priest  
J. Smith  
J. Reynolds  
P. Mathur  
L. Butler  
S. O'Connor

GLOBAL NUCLEAR FUEL - AMERICAS, L.L.C.  
WILMINGTON, NORTH CAROLINA

NRC LICENSE SNM 1097, DOCKET # 70-1113

**SEMI-ANNUAL EFFLUENT REPORT**

January 2011 - June 2011  
Fiscal Weeks 1-26

**I. GASEOUS EFFLUENT-PARTICULATE**

NUCLIDES	QUANTITY (Ci)	CONCENTRATION (uCi/cc)	10CFR20 APPENDIX B, TABLE 2, COLUMN 1 LIMIT	% of LIMIT
			(uCi/cc)	
U234	7.34E-06	4.32E-15	5.E-14	8.63%
U235	2.80E-07	1.65E-16	6.E-14	0.27%
U236	1.41E-08	8.27E-18	6.E-14	0.01%
U238	9.12E-07	5.36E-16	6.E-14	0.89%
TOTAL U	8.54E-06			

EXHAUST VOLUME = 1.70E+15 (cc)

SAMPLING IS CONTINUOUS.

ABNORMAL RELEASES:

TOTAL NUMBER OF RELEASES = 0  
TOTAL ACTIVITY RELEASED = 0 Ci

**II. LIQUID EFFLUENT**

NUCLIDES	QUANTITY (Ci)	CONCENTRATION (uCi/cc)	10CFR20 APPENDIX B, TABLE 2, COLUMN 1 LIMIT	% of LIMIT
			(uCi/cc)	
U234	6.08E-03	2.33E-08	3.E-07	7.75%
U235	2.32E-04	8.87E-10	3.E-07	0.30%
U236	1.16E-05	4.46E-11	3.E-07	0.01%
U238	7.56E-04	2.89E-09	3.E-07	0.96%
TOTAL U	7.08E-03			

SAMPLES ANALYZED ARE REPRESENTATIVE, CONTINUOUS COMPOSITE SAMPLES OF PROCESS EFFLUENT STREAM.

TOTAL VOLUME OF LIQUID EFFLUENT = 2.61E+08 (litres)

ABNORMAL RELEASES

TOTAL NUMBER OF RELEASES = 0  
TOTAL ACTIVITIES RELEASED = 0 Ci

**NOTE:** Reported values are representative of the effluent concentration at the point of release and do not consider effects of dilution from point of release to the plant site boundary.