

6 4 8 0 0 1 0 4 4 6 9



Nuclear Fuel Services  
1205 Banner Hill Road  
Erwin, TN 37650

(615) 743-9141

USNRC DIST  
CFJ  
MIM/JRC  
GEB  
RLB  
BEK/OEP/NES/CWT  
CLB  
BULLETIN BOARD  
RPD  
KDH  
SCJ  
MCT  
RBS  
GEN. SYST.  
AMM  
RLI  
JEX  
TFE  
CHRON FILE  
FILE COPY  
ORIG. SHF

*Ky*  
21G-91-0030  
GOV-01-55-03  
~~ACE-91-091~~  
March 1, 1991  
ACE91-091

CERTIFIED MAIL  
RETURN RECEIPT REQUESTED

U. S. Nuclear Regulatory Commission  
Office of Inspection and Enforcement  
101 Marietta Street, N. W., Suite 2900  
Atlanta, GA 30323

Attention: Stewart Ebnetter, Regional Administrator

Reference: (1) Docket No 70-143/SNM-124

Gentlemen:

In accordance with the requirements set forth in Title 10 CFR, Part 70.59, Nuclear Fuel Services, Inc., submits the attached report of its effluent monitoring at the Erwin, Tennessee Plant for the period covering June through December, 1990. Samples used for isotopic analyses of the October discharge from our Waste Water Treatment Facility were lost at the offsite laboratory and will not be available. Consequently the October isotopic values were based on an average of those months having gross alpha values within October's error band (113-769 pci/l). Please contact us if you have any questions regarding this report.

Use our unique identification number (21G-91-0030) in any correspondence concerning this letter.

Sincerely,

NUCLEAR FUEL SERVICES, INC.

*Donald Paine*  
Donald Paine, Ph.D.  
Vice President,  
Safety and Regulatory

DP/SNF:klz2/28  
Attachment

cc: Director  
Office of Nuclear Material Safety and Safeguards  
U. S. Nuclear Regulatory Commission  
Washington, DC 20555

Mr. Charles J. Haughney, Chief  
Fuel Cycle Safety Branch  
U. S. Nuclear Regulatory Commission  
Division of Industrial and Medical Nuclear Safety, NMSS  
Washington, DC 20555

REEL #

FRAME #

6 4 8 0 0 1 0 4 4 7 0

NUCLEAR FUEL SERVICES, INC  
Erwin, Tennessee

REPORT OF EFFLUENT MONITORING  
AND  
RELEASE TO UNRESTRICTED AREAS

License No.: SNM-124      Period Covered: JULY 1, 1990  
Docket No.: 70-143      DECEMBER 31, 1990

I. Gaseous Effluents

Radionuclide	Quantity Released (Curies)		
Uranium-234	8.56E-04	+/-	1.69E-05
Uranium-235	1.67E-05	+/-	3.33E-07
Uranium-236	1.02E-07	+/-	2.13E-09
Uranium-238	4.77E-08	+/-	1.52E-08
Plutonium-238	4.49E-09	+/-	7.28E-10
Plutonium-239	2.40E-09	+/-	3.90E-10
Plutonium-240	2.17E-09	+/-	3.52E-10
Plutonium-241	2.96E-07	+/-	4.81E-08
Plutonium-242	3.08E-12	+/-	5.00E-13
Americium-241	2.77E-09	+/-	4.49E-10

II. Liquid Effluents

Radionuclide	Quantity Released (Curies)		
Uranium-234	9.35E-03	+/-	1.06E-03
Uranium-235	3.22E-04	+/-	3.75E-05
Uranium-238	2.99E-04	+/-	3.76E-04
Thorium-228	9.78E-05	+/-	1.06E-05
Thorium-230	1.51E-04	+/-	2.14E-06
Thorium-232	2.10E-05	+/-	1.50E-06
Thorium-234	1.41E-03	+/-	2.06E-04
Plutonium-238	1.44E-04	+/-	1.34E-06
Plutonium-239	8.49E-05	+/-	1.93E-05
Technetium-99	1.21E-03	+/-	3.16E-04