



August 27, 2007
RKB:07:029

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

Dear Mr. Strosnider:

License SNM-1227
Docket 70-1257

Subject: Required Reporting of Effluents per 10 CFR 70.59

As required by 10 CFR 70.59, AREVA NP Inc. (AREVA NP) is reporting discharges of radioactive materials in the effluents from its nuclear fuels fabrication plant on Horn Rapids Road in Richland, Washington. Data from January 1, 2007 through June 30, 2007 are reported in the attached tables.

All data indicate continued compliance with applicable discharge limits. If there are any questions, please contact me at (509) 375-8638.

Very truly yours,

A handwritten signature in black ink that reads 'R. K. Burklin'.

R. K. Burklin
Radiation Protection

/mah

Attachments

cc: W. D. Travers, U.S. Nuclear Regulatory Commission, Region II
J. J. Martel, State of Washington Department of Health
W. B. Gloersen, U.S. Nuclear Regulatory Commission, Region II

AREVA NP INC.

An AREVA and Siemens company

2101 Horn Rapids Road, Richland, WA 99354
Tel.: 509 375 8100 - Fax: 509 375 8777 - www.aveva.com

Handwritten initials 'JE17' in black ink.

Gaseous Effluent January 1, 2007 – June 30, 2007					
Stack	Average Concentration (μCi/ml)	Error Estimate (%)	Average LLD (μCi/ml)*	Quantity (μCi α)	Flow (m ³)
Low Enriched Uranium					
K03	2.98E-15	17	6.36E-15	0.79	2.65E+08
K06	1.00E-15	28	3.78E-15	0.11	1.10E+08
K21	2.46E-15	41	1.43E-14	0.09	3.67E+07
K25	1.21E-15	31	5.01E-15	0.02	1.90E+07
K31	1.31E-15	5	6.52E-13	0.29	2.21E+08
K37	8.33E-16	33	3.55E-15	0.08	9.84E+07
K42	1.00E-15	22	3.01E-15	0.05	4.44E+07
K46	7.24E-16	42	4.09E-15	0.09	1.13E+08
K47	1.82E-15	44	1.16E-14	0.01	6.94E+06
K49	1.33E-15	23	3.79E-15	0.08	6.37E+07
K50	7.61E-15	10	8.97E-15	0.04	5.24E+06
K55	1.03E-15	38	5.30E-15	0.00	5.73E+06
K56	2.38E-15	27	7.01E-15	0.01	4.05E+06
K58	5.08E-16	43	3.18E-15	0.07	1.45E+08
K60	1.10E-15	40	5.25E-15	0.08	7.73E+07
K62	1.14E-15	47	8.90E-15	0.41	3.72E+08
K65	2.17E-15	25	7.15E-15	0.03	1.54E+07
K67	2.04E-15	24	6.58E-15	0.02	7.55E+06
K69	2.50E-15	18	5.74E-15	0.08	3.35E+07
K72	2.31E-15	12	3.27E-15	0.51	2.30E+08
TOTAL				2.88	1.87E+09

Stack	Average Concentration (μCi/ml)	Error Estimate (%)	Average LLD (μCi/ml)*	Quantity (μCi β)	Flow (m ³)
Radionuclide: Mixed Fission and Activation Products					
K52	-9.15E-16	675	7.63E-14	-0.07	5.22E+07
TOTAL				-0.07	5.22E+07
TOTAL (if negatives are dropped)				0.00	5.21E+07

* Typical lower limit of detection for 7-day sampling.

Liquid Effluent*					
January 1, 2007 – June 30, 2007					
Constituent	Concentration ($\mu\text{Ci/ml}$)	Error Estimate (%)	LLD ($\mu\text{Ci/ml}$)	Quantity (Ci)	Liquid Volume (m^3)
U	<1.16E-07	66	**	<0.01	9.30E+04
Tc-99	<2.91E-07	56	**	<0.027	
Total Ci				<0.037	

* Combined liquid effluent released to City of Richland sewer system.
 ** These constituents are analyzed chemically via Inductively Coupled Plasma/Mass Spectroscopy (ICP/MS) as opposed to radiation counting. Laboratory detection limits for uranium and Tc-99 are 1 part per billion and 5 parts per trillion, respectively.