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

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, 2011 through June 30, 2011 are reported in the attached tables. All listed data indicate continued compliance with applicable discharge limits.

Please note in the liquid effluent table that uranium is denoted as "Soluble U". It was recently discovered that the protocol utilized by the onsite laboratory facility was not responsive to insoluble uranium, meaning that the reported values were not total uranium as assumed. The protocol has been revised to be responsive to total uranium and the issue is being addressed within the site's formal corrective action program.

If there are any questions, please contact me at (509) 375-8638.

Very truly yours,

A handwritten signature in cursive script that reads 'R K Burklin'.

R. K. Burklin
Radiation Protection

/mah

Attachments

cc: V. McCree, U.S. Nuclear Regulatory Commission, Region II
P. J. Martell, State of Washington Department of Health
M. L. Thomas, 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 - www.aveva.com

NIM5501

Gaseous Effluent January 1, 2011 - June 30, 2011				
Stack	Average Concentration ($\mu\text{Ci/ml}$)	Average LLD ($\mu\text{Ci/ml}$)*	Quantity ($\mu\text{Ci } \alpha$)**	Flow (m^3)
Low Enriched Uranium				
K03	8.89E-16	3.80E-15	0.24	2.71E+08
K06	1.43E-15	3.65E-15	0.16	1.09E+08
K21	2.38E-15	2.23E-14	0.10	4.32E+07
K25	1.03E-15	4.34E-15	0.03	2.68E+07
K31	1.47E-15	1.99E-14	0.36	2.42E+08
K37	8.08E-16	5.30E-15	0.08	9.32E+07
K42	1.19E-16	4.74E-15	0.00	3.75E+07
K46	3.09E-16	4.15E-15	0.06	1.06E+08
K47	2.01E-15	1.22E-14	0.02	8.22E+06
K49	8.65E-16	4.33E-15	0.06	6.80E+07
K50	1.75E-14	9.37E-15	0.04	4.11E+06
K55	1.79E-15	5.83E-15	0.01	5.17E+06
K56	4.16E-15	4.44E-15	0.00	2.87E+06
K58	2.93E-16	3.39E-15	0.00	1.18E+08
K60	-2.60E-16	5.11E-15	-0.02	8.62E+07
K62	1.54E-16	5.62E-15	0.06	3.79E+08
K65	6.73E-16	3.97E-15	0.01	1.62E+07
K67	2.04E-15	6.33E-15	0.01	7.05E+06
K72	6.24E-16	3.58E-15	0.14	2.17E+08
TOTAL			1.35	1.84E+09
Total if negatives are dropped			1.37	

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

** Based on low enriched uranium

January 1, 2011 - June 30, 2011				
Stack	Average Concentration ($\mu\text{Ci/ml}$)*	Average LLD ($\mu\text{Ci/ml}$)**	Quantity (μCi)	Flow (m^3)
Radionuclide: Rn-220				
K37	-2.54E-10	---	-2.37E+04	9.33E+07
K31	3.39E-09	---	1.42E+06	2.42E+08
TOTAL			1.40E+06	4.60E+08
TOTAL (if negatives are dropped)			1.42E+06	

* Radon concentrations are determined by e-perms, which rely on changes in voltage; no counting instruments

Liquid Effluent*				
January 1, 2011 - June 30, 2011				
Constituent	Concentration ($\mu\text{Ci/ml}$)	LLD ($\mu\text{Ci/ml}$)	Quantity (Ci)	Liquid Volume (m^3)
Soluble U	<1.46E-07	**	<0.009	6.16E+04
Tc-99	<9.74E-08	**	<0.006	
Total Ci			<0.015	

- * 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. Consistent with past practice, uranium concentrations detected via ICP/MS at levels below 0.05 ppm are reported as <0.05 ppm.