

February 19, 2008



SNM 1168, docket 70-1201

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

Subject: Semi-annual effluent report: July 01, 2007 through December 31, 2007

In accord with the provisions of 10 CFR 70.59, the Mount Athos Road Facility of AREVA NP (Lynchburg, Virginia) submits the enclosed gaseous effluent report for the second semi-annual period of 2007.

You may contact me at (434) 832-5276 should you have any questions or require additional information regarding the enclosed report.

Sincerely,

A handwritten signature in black ink, appearing to read 'Charles F. Holman'.

**Charles F. Holman
Manager, Environmental, Health,
Safety and Licensing**

A handwritten signature in black ink, appearing to read 'Geoffrey A. Wertz'.

**Geoffrey A. Wertz
Manager, Environmental, Health
Safety and Licensing**

EFFECTIVE 2/25/2008

**cc: USNRC, Region II
Sam Nunn Atlanta Federal Center; Suite 23T85
61 Forsyth Street, SW
Atlanta, Georgia 30303-8931**

**Leslie P. Foldesi
Commonwealth of Virginia
Department of Health
P.O. Box 2448
Richmond, VA 23218**

EHS&L 05-301

AREVA NP INC.
An AREVA and Siemens company

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Gaseous Effluent Report

2nd semiannual, year 2007

1. PLR

Reporting Period: 07/01/2007 to 12/31/2007
Sample Collection Point: Main Plant Stack - 1 sampling pt.
Volume Released: 2.911E+09 cubic feet
Stack Flow Rate (typical): 11050 cubic feet per minute
Activity Released Gross Alpha: 0.288 uCi
Gross Beta: 0.000 uCi

Isotope	Activity (uCi)	Concentration (uCi/ml)	% DAC
U-232	2.14E-08	2.60E-22	0.000002598
U-234	2.23E-01	2.71E-15	5.416998829
U-235	1.24E-02	1.51E-16	0.251483301
U-236	7.06E-04	8.56E-18	0.014270262
U-238	5.19E-02	6.29E-16	1.048588331

3. SERF-3 RCA

Reporting Period: 07/01/2007 to 12/31/2007
Sample Collection Point: SERF-3 RCA Stack - 1 sampling pt.
Volume Released: 1.348E+09 cubic feet
Stack Flow Rate (typical): 5089 cubic feet per minute
Activity Released Gross Alpha: 0.000 uCi
Gross Beta: 3.531 uCi

Isotope	Activity (uCi)	Concentration (uCi/ml)	% DAC
Co-60	3.531	9.25E-14	0.19

Gaseous Effluent Report

2nd semiannual, year 2007

4. SERF-4 RCA

Reporting Period: 07/01/2007 to 12/31/2007
Sample Collection Point: SERF-4 RCA Stack - 1 sampling pt.
Volume Released: 4.100E+09 cubic feet
Stack Flow Rate (typical): 15437 cubic feet per minute
Activity Released Gross Alpha: 0.000 uCi
Gross Beta: 10.900 uCi

Isotope	Activity (uCi)	Concentration (uCi/ml)	% DAC
Co-60	10.900	9.39E-14	0.19

5. Chem Lab

Reporting Period: 07/01/2007 to 12/31/2007
Sample Collection Point: Chem Lab - 3 sampling pts.
Volume Released: 6.856E+08 cubic feet
Stack Flow Rate (typical): 898 cubic feet per minute
Activity Released Gross Alpha: 0.000 uCi
Gross Beta: 2.670 uCi

Isotope	Activity (uCi)	Concentration (uCi/ml)	% DAC
Co-60	2.670	1.38E-13	0.28

Gaseous Effluent Report

2nd semiannual, year 2007

6. SERF 5

Reporting Period: 07/01/2007 to 12/31/2007
Sample Collection Point: SERF 5 - 3 sampling points
Volume Released: 5.728E+09 cubic feet
Stack Flow Rate (typical): 14586 cubic feet per minute
Activity Released Gross Alpha: 0.000 uCi
Gross Beta: 36.96 uCi

Isotope	Activity (uCi)	Concentration (uCi/ml)	% DAC
Co-60	36.960	2.28E-13	0.46

6. Maximum Concentration Released in One Sampling Period:

Reporting Period: 2nd semiannual, year 2007

Isotope	DAC (uCi/ml)	maximum Concentration (uCi/ml)	% DAC
U-232	1.0E-14	6.342E-15	63.42
U-234	5.0E-14	6.342E-15	12.68
U-235	6.0E-14	6.342E-15	10.57
U-236	6.0E-14	6.342E-15	10.57
U-238	6.0E-14	6.342E-15	10.57
Co-60	5.0E-11	8.535E-12	17.07