



SNM 1168, docket 70-1201

February 24, 2004

**US Nuclear Regulatory Commission  
Region II  
Sam Nunn Atlanta Federal Center  
61 Forsyth Street SW, Suite 23T85  
Atlanta, GA 30303**

**Subject: Semi-annual effluent report: July 01, 2003 through December 31, 2003**

**In accord with the provisions of 10 CFR 70.59, the Mount Athos Road Facility of Framatome ANP (Lynchburg, Virginia) submits the enclosed gaseous effluent report for the second semi-annual period of 2003.**

**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', written in a cursive style.

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

**cc: Mr. Bob Pearson  
Director, Office of Nuclear Material Safety and Safeguards  
United States Nuclear Regulatory Commission  
Washington, D.C. 20555**

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

**EHS&L 03-301**

# Gaseous Effluent Report

2nd semiannual, year 2003

## 1. PLR

Reporting Period: 07/01/2003 to 12/30/2003  
Sample Collection Point: Main Plant Stack  
Volume Released: 3.040E+09 cubic feet  
Stack Flow Rate (typical): 11480 cubic feet per minute  
Activity Released Gross Alpha: 1.312 uCi  
Gross Beta: 0.000 uCi

Isotope	Activity (uCi)	Concentration (uCi/ml)	% DAC
U-234	1.02E+00	1.18E-14	23.61
U-235	5.66E-02	6.58E-16	1.10
U-236	3.21E-03	3.73E-17	0.06
U-238	2.36E-01	2.74E-15	4.57

## 2. SERF-2 RCA

Reporting Period: 07/01/2003 to 12/31/2003  
Sample Collection Point: SERF-2 RCA Stack  
Volume Released: 1.23E+08 cubic feet  
Stack Flow Rate (typical): 459 cubic feet per minute  
Activity Released Gross Alpha: 0.000 uCi  
Gross Beta: 1.220 uCi

Isotope	Activity (uCi)	Concentration (uCi/ml)	% DAC
Co-60	1.220	3.49E-13	0.70

## 3. SERF-3 RCA

Reporting Period: 07/01/2003 to 12/31/2003  
Sample Collection Point: SERF-3 RCA Stack  
Volume Released: 1.31E+09 cubic feet  
Stack Flow Rate (typical): 4938 cubic feet per minute  
Activity Released Gross Alpha: 0.000 uCi  
Gross Beta: 9.964 uCi

Isotope	Activity (uCi)	Concentration (uCi/ml)	% DAC
Co-60	9.964	2.69E-13	0.54

#### 4. SERF-4 RCA

Reporting Period: 07/01/2003 to 12/31/2003  
Sample Collection Point: SERF-4 RCA Stack  
Volume Released: 2.68E+09 cubic feet  
Stack Flow Rate (typical): 9986 cubic feet per minute  
Activity Released Gross Alpha: 0.000 uCi  
Gross Beta: 29.170 uCi

Isotope	Activity (uCi)	Concentration (uCi/ml)	% DAC
Co-60	29.170	3.84E-13	0.77

#### 5. Chem Lab

Reporting Period: 07/01/2003 to 12/31/2003  
Sample Collection Point: Chem Lab - 3 pts.  
Volume Released: 4.01E+08 cubic feet  
Stack Flow Rate (typical): 500 cubic feet per minute  
Activity Released Gross Alpha: 0.000 uCi  
Gross Beta: 8.503 uCi

Isotope	Activity (uCi)	Concentration (uCi/ml)	% DAC
Co-60	8.503	7.50E-13	1.50

#### 6. Maximum Concentration Released in One Sampling Period:

Reporting Period: 07/01/2003 to 12/31/2003

Isotope	DAC (uCi/ml)	maximum Concentration (uCi/ml)	% DAC
U-234	5.0E-14	3.67E-14	73.30
U-235	6.0E-14	2.04E-15	3.41
U-236	6.0E-14	1.16E-16	0.19
U-238	6.0E-14	8.51E-15	14.18
Co-60	5.0E-11	1.69E-12	3.38