



SNM 1168, docket 70-1201

August 19, 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: January 01, 2004 through June 31, 2004**

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 first semi-annual period of 2004.

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

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 04-301

JE17

# Gaseous Effluent Report

1st semiannual, year 2004

## 1. PLR

Reporting Period: 01/01/2004 to 06/28/2004  
Sample Collection Point: Main Plant Stack  
Volume Released: 2.976E+09 cubic feet  
Stack Flow Rate (typical): 11539 cubic feet per minute  
Activity Released Gross Alpha: 0.677 uCi  
Gross Beta: 0.000 uCi

| Isotope | Activity (uCi) | Concentration (uCi/ml) | % DAC |
|---------|----------------|------------------------|-------|
| U-234   | 5.25E-01       | 6.23E-15               | 12.45 |
| U-235   | 2.92E-02       | 3.47E-16               | 0.58  |
| U-236   | 1.66E-03       | 1.97E-17               | 0.03  |
| U-238   | 1.22E-01       | 1.45E-15               | 2.41  |

## 2. SERF-2 RCA

Reporting Period: 01/01/2004 to 06/28/2004  
Sample Collection Point: SERF-2 RCA Stack  
Volume Released: 1.17E+08 cubic feet  
Stack Flow Rate (typical): 461 cubic feet per minute  
Activity Released Gross Alpha: 0.000 uCi  
Gross Beta: 0.994 uCi

| Isotope | Activity (uCi) | Concentration (uCi/ml) | % DAC |
|---------|----------------|------------------------|-------|
| Co-60   | 0.994          | 3.01E-13               | 0.60  |

## 3. SERF-3 RCA

Reporting Period: 01/01/2004 to 06/27/2004  
Sample Collection Point: SERF-3 RCA Stack  
Volume Released: 1.17E+09 cubic feet  
Stack Flow Rate (typical): 4457 cubic feet per minute  
Activity Released Gross Alpha: 0.000 uCi  
Gross Beta: 6.915 uCi

| Isotope | Activity (uCi) | Concentration (uCi/ml) | % DAC |
|---------|----------------|------------------------|-------|
| Co-60   | 6.915          | 2.09E-13               | 0.42  |

4. SERF-4 RCA

Reporting Period: 01/01/2004 to 06/27/2004  
 Sample Collection Point: SERF-4 RCA Stack  
 Volume Released: 2.71E+09 cubic feet  
 Stack Flow Rate (typical): 10790 cubic feet per minute  
 Activity Released Gross Alpha: 0.000 uCi  
 Gross Beta: 24.560 uCi

| Isotope | Activity (uCi) | Concentration (uCi/ml) | % DAC |
|---------|----------------|------------------------|-------|
| Co-60   | 24.560         | 3.20E-13               | 0.64  |

5. Chem Lab

Reporting Period: 07/01/2003 to 12/31/2003  
 Sample Collection Point: Chem Lab - 3 pts.  
 Volume Released: 3.89E+08 cubic feet  
 Stack Flow Rate (typical): 549 cubic feet per minute  
 Activity Released Gross Alpha: 0.000 uCi  
 Gross Beta: 8.588 uCi

| Isotope | Activity (uCi) | Concentration (uCi/ml) | % DAC |
|---------|----------------|------------------------|-------|
| Co-60   | 8.588          | 7.80E-13               | 1.56  |

6. Maximum Concentration Released in One Sampling Period:

Reporting Period: 1<sup>st</sup> semiannual, 2004

| Isotope | DAC (uCi/ml) | maximum Concentration (uCi/ml) | % DAC |
|---------|--------------|--------------------------------|-------|
| U-234   | 5.0E-14      | 4.517E-14                      | 90.34 |
| U-235   | 6.0E-14      | 4.517E-14                      | 75.28 |
| U-236   | 6.0E-14      | 4.517E-14                      | 75.28 |
| U-238   | 6.0E-14      | 4.517E-14                      | 75.28 |
| Co-60   | 5.0E-11      | 7.497E-12                      | 14.99 |