



SNM 1168, docket 70-1201

August 11, 2005

**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: January 01, 2005 through June 30, 2005**

**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 2005.**

**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, Environmental, Health,  
Safety and Licensing**

**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**

# Gaseous Effluent Report

1<sup>st</sup> semiannual, year 2005

## 1. PLR

Reporting Period: 01/01/2005 to 06/30/2005  
Sample Collection Point: Main Plant Stack  
Volume Released: 2.629E+09 cubic feet  
Stack Flow Rate (typical): 10019 cubic feet per minute  
Activity Released Gross Alpha: 0.262 uCi  
Gross Beta: 0.000 uCi

Isotope	Activity (uCi)	Concentration (uCi/ml)	% DAC
U-234	2.03E-01	2.73E-15	5.46
U-235	1.13E-02	1.52E-16	0.25
U-236	6.43E-04	8.63E-18	0.01
U-238	4.72E-02	6.34E-16	1.06

## 2. SERF-2 RCA

(removed radioactive material from building on 11/23/04; effluent discontinued)

## 3. SERF-3 RCA

Reporting Period: 01/01/2005 to 06/30/2005  
Sample Collection Point: SERF-3 RCA Stack  
Volume Released: 1.16E+09 cubic feet  
Stack Flow Rate (typical): 4392 cubic feet per minute  
Activity Released Gross Alpha: 0.000 uCi  
Gross Beta: 2.935 uCi

Isotope	Activity (uCi)	Concentration (uCi/ml)	% DAC
Co-60	2.935	8.94E-14	0.18

## 4. SERF-4 RCA

Reporting Period: 01/01/2005 to 06/30/2005  
Sample Collection Point: SERF-4 RCA Stack  
Volume Released: 2.52E+09 cubic feet  
Stack Flow Rate (typical): 9568 cubic feet per minute  
Activity Released Gross Alpha: 0.000 uCi  
Gross Beta: 6.618 uCi

Isotope	Activity (uCi)	Concentration (uCi/ml)	% DAC
Co-60	6.618	9.28E-14	0.19

**5. Chem Lab**

Reporting Period: 01/01/2005 to 06/30/2005  
 Sample Collection Point: Chem Lab - 3 sampling pts.  
 Volume Released: 4.90E+08 cubic feet  
 Stack Flow Rate (typical): 644 cubic feet per minute  
 Activity Released Gross Alpha: 0.000 uCi  
 Gross Beta: 4.630 uCi

Isotope	Activity (uCi)	Concentration (uCi/ml)	% DAC
Co-60	4.630	3.34E-13	0.67

**5. SERF 5**

Reporting Period: 01/01/2005 to 06/30/2005  
 Sample Collection Point: SERF 5 - 2 sampling points  
 Volume Released: 5.66E+09 cubic feet  
 Stack Flow Rate (typical): 15110 cubic feet per minute  
 Activity Released Gross Alpha: 0.000 uCi  
 Gross Beta: 14.676 uCi

Isotope	Activity (uCi)	Concentration (uCi/ml)	% DAC
Co-60	14.676	9.15E-14	0.18

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

Reporting Period: 1st semiannual, year 2005

Isotope	DAC (uCi/ml)	maximum Concentration (uCi/ml)	% DAC
U-234	5.0E-14	1.242E-14	24.84
U-235	6.0E-14	1.242E-14	20.70
U-236	6.0E-14	1.242E-14	20.70
U-238	6.0E-14	1.242E-14	20.70
Co-60	5.0E-11	2.599E-12	5.20