

February 22, 2006



**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, 2005 through December 31, 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 second 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 over a horizontal line.

**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**

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

**EHS&L 05-301**

JE17

# Gaseous Effluent Report

2<sup>nd</sup> semiannual, year 2005

## 1. PLR

Reporting Period: 07/01/2005 to 12/31/2005  
Sample Collection Point: Main Plant Stack  
Volume Released: 2.760E+09 cubic feet  
Stack Flow Rate (typical): 10559 cubic feet per minute  
Activity Released Gross Alpha: 0.352 uCi  
Gross Beta: 0.000 uCi

Isotope	Activity (uCi)	Concentration (uCi/ml)	% DAC
U-234	2.72E-01	3.48E-15	6.97
U-235	1.52E-02	1.94E-16	0.32
U-236	8.61E-04	1.10E-17	0.02
U-238	6.32E-02	8.09E-16	1.35

## 2. SERF-2 RCA

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

## 3. SERF-3 RCA

Reporting Period: 07/01/2005 to 12/31/2005  
Sample Collection Point: SERF-3 RCA Stack  
Volume Released: 9.03E+08 cubic feet  
Stack Flow Rate (typical): 3467 cubic feet per minute  
Activity Released Gross Alpha: 0.000 uCi  
Gross Beta: 2.635 uCi

Isotope	Activity (uCi)	Concentration (uCi/ml)	% DAC
Co-60	2.635	1.03E-13	0.21

## 4. SERF-4 RCA

Reporting Period: 07/01/2005 to 12/31/2005  
Sample Collection Point: SERF-4 RCA Stack  
Volume Released: 2.79E+09 cubic feet  
Stack Flow Rate (typical): 10721 cubic feet per minute  
Activity Released Gross Alpha: 0.000 uCi  
Gross Beta: 6.054 uCi

Isotope	Activity (uCi)	Concentration (uCi/ml)	% DAC
Co-60	6.054	7.67E-14	0.15

**5. Chem Lab**

Reporting Period: 07/01/2005 to 12/31/2005  
 Sample Collection Point: Chem Lab - 3 sampling pts.  
 Volume Released: 4.66E+08 cubic feet  
 Stack Flow Rate (typical): 599 cubic feet per minute  
 Activity Released Gross Alpha: 0.000 uCi  
 Gross Beta: 3.914 uCi

Isotope	Activity (uCi)	Concentration (uCi/ml)	% DAC
Co-60	3.914	2.97E-13	0.59

**5. SERF 5**

Reporting Period: 07/01/2005 to 12/31/2005  
 Sample Collection Point: SERF 5 - 2 sampling points  
 Volume Released: 5.37E+09 cubic feet  
 Stack Flow Rate (typical): 14197 cubic feet per minute  
 Activity Released Gross Alpha: 0.000 uCi  
 Gross Beta: 14.612 uCi

Isotope	Activity (uCi)	Concentration (uCi/ml)	% DAC
Co-60	14.612	9.62E-14	0.19

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

Reporting Period: 2nd semiannual, year 2005

Isotope	DAC (uCi/ml)	maximum Concentration (uCi/ml)	% DAC
U-234	5.0E-14	1.508E-14	30.16
U-235	6.0E-14	1.508E-14	25.13
U-236	6.0E-14	1.508E-14	25.13
U-238	6.0E-14	1.508E-14	25.13
Co-60	5.0E-11	9.406E-12	18.81