



Risk Reduction & Environmental Stewardship Division

Meteorology & Air Quality Group

PO Box 1663, MS J978

Los Alamos, New Mexico 87545

(505) 665-8855/Fax: (505) 665-8858

Date: February 9, 2004

Refer to: RRES-MAQ:04-050

Dr. John Volkerding
New Mexico Environment Department
Air Quality Bureau
Compliance Program Manager
2048 Galisteo St.
Santa Fe, New Mexico 87505

Mr. Vincent Vigil
New Mexico Environment Department
Air Quality Bureau
Enforcement Program Manager
2048 Galisteo Street
Santa Fe, New Mexico 87505

Gentlemen:

Attached you will find a copy of the official sampling data obtained from the continuous air monitor installed on the main exhaust stack at the Beryllium Technology Facility (BTF) at Los Alamos National Laboratory (LANL) for the **fourth quarter of calendar year 2003**. This submission of the quarterly emissions data, collected from this source, is required by permit condition 5.f of NMED Air Quality Permit #634-M2 dated October 30, 1998. Furthermore, this quarterly report is transmitted within the allowed 60 days after the end of the calendar quarter, as specified in the permit.

As specified in permit #634-M2, the beryllium stack emissions from the BTF shall not exceed 0.35 grams in a 24-hour time period and shall not exceed 3.5 grams per year. As can be seen on the attached data sheets, the largest daily emission rate during the fourth quarter of calendar year 2003 was $< 2.15 \times 10^{-5}$ grams which are well below the daily permit limit. Additionally, the total amount of beryllium emitted from this source during calendar year 2003 was $< 6.93 \times 10^{-3}$ grams, which is well below the 3.5 grams per year limit specified in the permit. Also, on the attached data sheets, you will note that the final data point for calendar year 2003 is December 24, 2003. This is due to the laboratory closure over the holidays, during which time the facility did not process material. Stack samples are not collected during this time and are allowed to remain in the sample collector for two weeks. This two-week sample will be reported as part of the 2004 emission report for this facility. Therefore, based on the attached information, LANL is in compliance with condition #2 of NMED Air Quality Permit #634-M2.

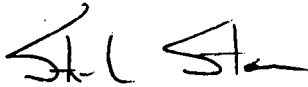
If you have any questions or comments regarding this submittal or would like to discuss this in greater detail, please feel free to contact me at 665-2169 or Stephen Cossey at 665-8893.

Dr. John Volkerding
Mr. Vincent Vigil
RRES-MAQ:04-050

-2-

February 9, 2004

Sincerely,



Steven L. Story
Meteorology & Air Quality Group

SLS:alb

Enc: a/s

Cy:

S. Fong, DOE-LA-AO, MS A316
K. Benally, DOE-LA-AO, MS A316
V. George, RRES-DO, MS J591
M. Reed, RRES-DO, MS J556
D. Stavert, RRES-EP, MS J951
J. Dewart, RRES- MAQ, MS J978
M. Stockton, RRES-MAQ, MS J978
S. Cossey, RRES-MAQ, MS J978
S. Abeln, MST-6, MS G770
K. Creek, MST-6, MS G741
P. Wardwell, LC-ESH, MS A187
RRES-MAQ Beryllium Permit #634 File
RRES-MAQ File

Beryllium Operating Group Report

2003 Stack Emissions

TA-3-141

StackID: 03014101

02/05/2004

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Sampling dates	Emissions (g)		Field	Comments	Analytical
	Weekly(1)	Daily(2)			
Period #: 1					
12/19/2002 - 01/02/2003	< 1.24E-04	< 8.83E-06			
01/02/2003 - 01/09/2003	< 1.24E-04	< 1.77E-05			
01/09/2003 - 01/16/2003	< 1.24E-04	< 1.77E-05			
01/16/2003 - 01/23/2003	< 1.24E-04	< 1.77E-05			
01/23/2003 - 01/30/2003	< 1.24E-04	< 1.77E-05			
Period #: 2					
01/30/2003 - 02/06/2003	< 1.24E-04	< 1.77E-05			
02/06/2003 - 02/13/2003	< 1.24E-04	< 1.77E-05			
02/13/2003 - 02/20/2003	< 1.24E-04	< 1.77E-05			
02/20/2003 - 02/27/2003	< 1.24E-04	< 1.77E-05			
Period #: 3					
02/27/2003 - 03/06/2003	< 1.24E-04	< 1.77E-05			
03/06/2003 - 03/13/2003	< 1.24E-04	< 1.77E-05			
03/13/2003 - 03/20/2003	< 1.24E-04	< 1.77E-05			
03/20/2003 - 03/27/2003	< 1.24E-04	< 1.77E-05			
Period #: 4					
03/27/2003 - 04/02/2003	< 1.24E-04	< 2.06E-05		Six day sample period this week.	
04/02/2003 - 04/10/2003	< 1.24E-04	< 1.55E-05		Eight day sample period.	
04/10/2003 - 04/17/2003	< 1.24E-04	< 1.77E-05			
04/17/2003 - 04/24/2003	< 1.24E-04	< 1.77E-05			
Period #: 5					
04/24/2003 - 05/01/2003	< 1.24E-04	< 1.76E-05			
05/01/2003 - 05/08/2003	< 1.24E-04	< 1.77E-05			
05/08/2003 - 05/15/2003	< 1.24E-04	< 1.77E-05			
05/15/2003 - 05/22/2003	< 1.24E-04	< 1.77E-05			
05/22/2003 - 05/29/2003	< 1.24E-04	< 1.77E-05			
Period #: 6					
05/29/2003 - 06/05/2003	< 1.24E-04	< 1.77E-05			
06/05/2003 - 06/12/2003	< 1.24E-04	< 1.77E-05			
06/12/2003 - 06/19/2003	< 1.24E-04	< 1.77E-05			
06/19/2003 - 06/26/2003	< 1.24E-04	< 1.77E-05			

Footnotes: Permit Terms

- (1) The sum of all weekly results must be less than 3.5 g/yr.
- (2) The daily value cannot exceed 0.35 g/day.

Sampling dates	Emissions (g)		Comments	
	Weekly(1)	Daily(2)	Field	Analytical
Period #: 7				
06/26/2003 - 07/03/2003	< 1.24E-04	< 1.76E-05		
07/03/2003 - 07/10/2003	< 1.24E-04	< 1.78E-05		
07/10/2003 - 07/17/2003	< 1.24E-04	< 1.76E-05		
07/17/2003 - 07/24/2003	< 1.24E-04	< 1.77E-05		
Period #: 8				
07/24/2003 - 07/31/2003	< 1.24E-04	< 1.77E-05		
07/31/2003 - 08/07/2003	< 1.24E-04	< 1.77E-05		
08/07/2003 - 08/14/2003	< 1.24E-04	< 1.77E-05		
08/14/2003 - 08/21/2003	< 1.24E-04	< 1.77E-05		
08/21/2003 - 08/28/2003	< 1.24E-04	< 1.77E-05		
Period #: 9				
08/28/2003 - 09/04/2003	< 1.24E-04	< 1.77E-05		
09/04/2003 - 09/11/2003	< 1.24E-04	< 1.76E-05		
09/11/2003 - 09/18/2003	2.13E-04	3.05E-05		Ventilation down for Maintenance. 9/15-24/2003.
09/18/2003 - 09/25/2003	4.88E-04	6.90E-05		
Period #: 10				
09/25/2003 - 10/02/2003	< 1.24E-04	< 1.78E-05		
10/02/2003 - 10/09/2003	< 1.24E-04	< 1.77E-05		
10/09/2003 - 10/16/2003	< 1.24E-04	< 1.77E-05		
10/16/2003 - 10/23/2003	< 1.24E-04	< 1.77E-05		
10/23/2003 - 10/30/2003	< 1.24E-04	< 1.77E-05		
Period #: 11				
10/30/2003 - 11/06/2003	< 1.27E-04	< 1.81E-05		
11/06/2003 - 11/13/2003	< 1.27E-04	< 1.83E-05		
11/13/2003 - 11/20/2003	< 1.27E-04	< 1.81E-05		
11/20/2003 - 11/26/2003	< 1.27E-04	< 2.15E-05		Due to Holiday sample period 6 days.
Period #: 12				
11/26/2003 - 12/04/2003	< 1.27E-04	< 1.58E-05		
12/04/2003 - 12/11/2003	< 1.27E-04	< 1.81E-05		
12/11/2003 - 12/18/2003	< 1.27E-04	< 1.85E-05		
12/18/2003 - 12/24/2003	< 1.27E-04	< 2.09E-05		

Footnotes: Permit Terms

- (1) The sum of all weekly results must be less than 3.5 g/yr.
(2) The daily value cannot exceed 0.35 g/day.

Beryllium Operating Group Report

2003 Stack Emissions

TA-3-141

StackID: 03014101

02/05/2004

Page 1 of 2

Sampling dates	Emissions (g)		Field	Comments	Analytical
	Weekly(1)	Daily(2)			
Period #: 1					
12/19/2002 - 01/02/2003	< 1.24E-04	< 8.83E-06			
01/02/2003 - 01/09/2003	< 1.24E-04	< 1.77E-05			
01/09/2003 - 01/16/2003	< 1.24E-04	< 1.77E-05			
01/16/2003 - 01/23/2003	< 1.24E-04	< 1.77E-05			
01/23/2003 - 01/30/2003	< 1.24E-04	< 1.77E-05			
Period #: 2					
01/30/2003 - 02/06/2003	< 1.24E-04	< 1.77E-05			
02/06/2003 - 02/13/2003	< 1.24E-04	< 1.77E-05			
02/13/2003 - 02/20/2003	< 1.24E-04	< 1.77E-05			
02/20/2003 - 02/27/2003	< 1.24E-04	< 1.77E-05			
Period #: 3					
02/27/2003 - 03/06/2003	< 1.24E-04	< 1.77E-05			
03/06/2003 - 03/13/2003	< 1.24E-04	< 1.77E-05			
03/13/2003 - 03/20/2003	< 1.24E-04	< 1.77E-05			
03/20/2003 - 03/27/2003	< 1.24E-04	< 1.77E-05			
Period #: 4					
03/27/2003 - 04/02/2003	< 1.24E-04	< 2.06E-05		Six day sample period this week.	
04/02/2003 - 04/10/2003	< 1.24E-04	< 1.55E-05		Eight day sample period.	
04/10/2003 - 04/17/2003	< 1.24E-04	< 1.77E-05			
04/17/2003 - 04/24/2003	< 1.24E-04	< 1.77E-05			
Period #: 5					
04/24/2003 - 05/01/2003	< 1.24E-04	< 1.76E-05			
05/01/2003 - 05/08/2003	< 1.24E-04	< 1.77E-05			
05/08/2003 - 05/15/2003	< 1.24E-04	< 1.77E-05			
05/15/2003 - 05/22/2003	< 1.24E-04	< 1.77E-05			
05/22/2003 - 05/29/2003	< 1.24E-04	< 1.77E-05			
Period #: 6					
05/29/2003 - 06/05/2003	< 1.24E-04	< 1.77E-05			
06/05/2003 - 06/12/2003	< 1.24E-04	< 1.77E-05			
06/12/2003 - 06/19/2003	< 1.24E-04	< 1.77E-05			
06/19/2003 - 06/26/2003	< 1.24E-04	< 1.77E-05			

Footnotes: Permit Terms

(1) The sum of all weekly results must be less than 3.5 g/yr.

(2) The daily value cannot exceed 0.35 g/day.

Sampling dates	Emissions (g)		Field	Comments	Analytical
	Weekly(1)	Daily(2)			
Period #: 7					
06/26/2003 - 07/03/2003	< 1.24E-04	< 1.76E-05			
07/03/2003 - 07/10/2003	< 1.24E-04	< 1.78E-05			
07/10/2003 - 07/17/2003	< 1.24E-04	< 1.76E-05			
07/17/2003 - 07/24/2003	< 1.24E-04	< 1.77E-05			
Period #: 8					
07/24/2003 - 07/31/2003	< 1.24E-04	< 1.77E-05			
07/31/2003 - 08/07/2003	< 1.24E-04	< 1.77E-05			
08/07/2003 - 08/14/2003	< 1.24E-04	< 1.77E-05			
08/14/2003 - 08/21/2003	< 1.24E-04	< 1.77E-05			
08/21/2003 - 08/28/2003	< 1.24E-04	< 1.77E-05			
Period #: 9					
08/28/2003 - 09/04/2003	< 1.24E-04	< 1.77E-05			
09/04/2003 - 09/11/2003	< 1.24E-04	< 1.76E-05			
09/11/2003 - 09/18/2003	2.13E-04	3.05E-05		Ventilation down for Maintenance. 9/15-24/2003.	
09/18/2003 - 09/25/2003	4.88E-04	6.90E-05		Annual High	
Period #: 10					
09/25/2003 - 10/02/2003	< 1.24E-04	< 1.78E-05			
10/02/2003 - 10/09/2003	< 1.24E-04	< 1.77E-05			
10/09/2003 - 10/16/2003	< 1.24E-04	< 1.77E-05			
10/16/2003 - 10/23/2003	< 1.24E-04	< 1.77E-05			
10/23/2003 - 10/30/2003	< 1.24E-04	< 1.77E-05			
Period #: 11					
10/30/2003 - 11/06/2003	< 1.27E-04	< 1.81E-05			
11/06/2003 - 11/13/2003	< 1.27E-04	< 1.83E-05			
11/13/2003 - 11/20/2003	< 1.27E-04	< 1.81E-05			
11/20/2003 - 11/26/2003	< 1.27E-04	< 2.15E-05		Quarter High Due to Holiday sample period 6 days.	
Period #: 12					
11/26/2003 - 12/04/2003	< 1.27E-04	< 1.58E-05			
12/04/2003 - 12/11/2003	< 1.27E-04	< 1.81E-05			
12/11/2003 - 12/18/2003	< 1.27E-04	< 1.85E-05			
12/18/2003 - 12/24/2003	< 1.27E-04	< 2.09E-05			

4th

Quarter

$$1.24 \times 10^{-4} * 5 = 6.2 \times 10^{-4}$$

$$1.27 \times 10^{-4} * 8 = 1.02 \times 10^{-3}$$

$$< 1.64 \times 10^{-3}$$

Quarter High
Due to Holiday sample period 6 days.

Annual

$$1.24 \times 10^{-4} * 42 = 5.21 \times 10^{-3}$$

$$1.27 \times 10^{-4} * 8 = 1.02 \times 10^{-3}$$

$$2.13 \times 10^{-4}$$

$$4.88 \times 10^{-4}$$

$$< 6.93 \times 10^{-3}$$

Footnotes: Permit Terms

- (1) The sum of all weekly results must be less than 3.5 g/yr.
- (2) The daily value cannot exceed 0.35 g/day.

Reviewed by
Stephen Lossary 2-6-04