



Environmental Stewardship Division
Meteorology and Air Quality Group
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Date: February 10, 2006
Refer to: ENV-MAQ:06-042

Mr. Edward Horst
Environmental Specialist, Compliance and Enforcement Section
New Mexico Environment Department
Air Quality Bureau
2048 Galisteo Street
Santa Fe, New Mexico 87505

**IDEA ID 856 – LOS ALAMOS NATIONAL LABORATORY
2005 FOURTH QUARTER BERYLLIUM REPORT, PERMIT 634-M2**

Dear Mr. Horst:

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 2005**. 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 sheet, the largest daily emission rate during the fourth quarter of calendar year 2005 was $< 2.13 \times 10^{-5}$ grams, which is well below the daily permit limit. The annual high daily emission was $< 2.13 \times 10^{-5}$ grams, which is well below the daily permit limit. The total amount of beryllium emitted for the fourth quarter of calendar year 2005 was $< 1.54 \times 10^{-3}$ grams, which is well below the 3.5 gram per year limit specified in the permit. Additionally, the total amount of beryllium emitted from this source for calendar year 2005 was $< 6.49 \times 10^{-3}$ grams, which is well below the 3.5 gram per year limit specified in the permit. Also, on the attached data sheet, you will note that the last data point for calendar year 2005 is December 22, 2005. 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 first quarter 2006 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.

Mr. Edward Horst
ENV-MAQ:06-042
LA-UR:06-1343

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February 10, 2006

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

Sincerely,



Dianne Wilburn
Meteorology & Air Quality Group

DW:alb

Enc: a/s

Cy:

S. Fong, DOE-LA-AO, MS A316
K. Hargis, ENV-DO, MS J591
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P. Dunn, MST-6, MS G770
S. Abeln, MST-6, MS G770
K. Creek, MST-6, MS G741
P. Wardwell, LC-ESH, MS A187
ENV-MAQ Beryllium Permit #634 Quarterly Report File
ENV-MAQ File

Beryllium Operating Group Report

2005 Stack Emissions

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StackID: 03014101

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Sampling dates	Emissions (g)		Field	Comments	Analytical
	Weekly(1)	Daily(2)			
Period #: 1					
12/23/2004 - 01/06/2005	< 1.27E-04	< 9.14E-06		Sample period due to Holiday.	
01/06/2005 - 01/13/2005	< 1.27E-04	< 1.81E-05			
01/13/2005 - 01/20/2005	< 1.27E-04	< 1.83E-05			
01/20/2005 - 01/27/2005	< 1.27E-04	< 1.83E-05			
01/27/2005 - 02/03/2005	< 1.27E-04	< 1.82E-05			
Period #: 2					
02/03/2005 - 02/10/2005	< 1.27E-04	< 1.82E-05			
02/10/2005 - 02/17/2005	< 1.27E-04	< 1.83E-05			
02/17/2005 - 02/24/2005	< 1.27E-04	< 1.79E-05			
02/24/2005 - 03/03/2005	< 1.27E-04	< 1.85E-05			
Period #: 3					
03/03/2005 - 03/10/2005	< 1.27E-04	< 1.82E-05			
03/10/2005 - 03/17/2005	< 1.27E-04	< 1.83E-05			
03/17/2005 - 03/24/2005	< 1.27E-04	< 1.82E-05			
03/24/2005 - 03/31/2005	< 1.27E-04	< 1.82E-05			
Period #: 4					
03/31/2005 - 04/07/2005	< 1.27E-04	< 1.82E-05			
04/07/2005 - 04/14/2005	< 1.27E-04	< 1.81E-05			
04/14/2005 - 04/21/2005	< 1.27E-04	< 1.83E-05			
04/21/2005 - 04/28/2005	< 1.27E-04	< 1.82E-05			
Period #: 5					
04/28/2005 - 05/05/2005	< 1.27E-04	< 1.82E-05			
05/05/2005 - 05/12/2005	< 1.27E-04	< 1.82E-05			
05/12/2005 - 05/19/2005	< 1.27E-04	< 1.82E-05			
05/19/2005 - 05/26/2005	< 1.27E-04	< 1.82E-05			
05/26/2005 - 06/02/2005	< 1.27E-04	< 1.82E-05			
Period #: 6					
06/02/2005 - 06/09/2005	< 1.27E-04	< 1.82E-05			
06/09/2005 - 06/16/2005	< 1.27E-04	< 1.82E-05			
06/16/2005 - 06/23/2005	< 1.27E-04	< 1.82E-05			
06/23/2005 - 06/30/2005	< 1.27E-04	< 1.82E-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.

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Sampling dates	Emissions (g)		Field	Comments	Analytical
	Weekly(1)	Daily(2)			
Period #: 7					
06/30/2005 - 07/07/2005	< 1.27E-04	< 1.82E-05			
07/07/2005 - 07/14/2005	< 1.27E-04	< 1.82E-05			
07/14/2005 - 07/21/2005	< 1.27E-04	< 1.82E-05			
07/21/2005 - 07/28/2005	< 1.27E-04	< 1.82E-05			
07/28/2005 - 08/04/2005	< 1.27E-04	< 1.80E-05			
Period #: 8					
08/04/2005 - 08/11/2005	< 1.27E-04	< 1.84E-05			
08/11/2005 - 08/18/2005	< 1.27E-04	< 1.82E-05			
08/18/2005 - 08/25/2005	< 1.27E-04	< 1.82E-05			
08/25/2005 - 09/01/2005	< 1.27E-04	< 1.83E-05			
Period #: 9					
09/01/2005 - 09/08/2005	< 1.27E-04	< 1.82E-05			
09/08/2005 - 09/15/2005	< 1.27E-04	< 1.83E-05			
09/15/2005 - 09/22/2005	< 1.27E-04	< 1.82E-05			
09/22/2005 - 09/29/2005	< 1.27E-04	< 1.82E-05			
Period #: 10					
09/29/2005 - 10/06/2005	< 1.27E-04	< 1.82E-05			
10/06/2005 - 10/13/2005	< 1.27E-04	< 1.82E-05			
10/13/2005 - 10/20/2005	< 1.27E-04	< 1.82E-05			
10/20/2005 - 10/27/2005	< 1.27E-04	< 1.82E-05			
10/27/2005 - 11/03/2005	< 1.27E-04	< 1.83E-05			
Period #: 11					
11/03/2005 - 11/09/2005	< 1.27E-04	< 2.01E-05		Facility access restrictions. Sample to be changed a day earlier on 11/09/05.	
11/09/2005 - 11/17/2005	< 1.27E-04	< 1.66E-05		Facility access restrictions. Sample changed a day earlier on 11/09/05 and ran one day longer 11/17/05.	
11/17/2005 - 11/23/2005	< 1.27E-04	< 2.13E-05		Sample period 6 days due to Thanksgiving.	
11/23/2005 - 12/01/2005	< 1.27E-04	< 1.59E-05		Sample period 8 days due to Thanksgiving.	
Period #: 12					
12/01/2005 - 12/08/2005	< 1.27E-04	< 1.82E-05			
12/08/2005 - 12/15/2005	< 1.27E-04	< 1.82E-05			
12/15/2005 - 12/22/2005	1.42E-04	2.02E-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.

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Beryllium Operating Group Report

2005 Stack Emissions

TA-3-141

StackID: 03014101

01/18/2006

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Sampling dates	Emissions (g)		Field	Comments	Analytical
	Weekly(1)	Daily(2)			
Period #: 1					
12/23/2004 - 01/06/2005	< 1.27E-04	< 9.14E-06		Sample period due to Holiday.	
01/06/2005 - 01/13/2005	< 1.27E-04	< 1.81E-05			
01/13/2005 - 01/20/2005	< 1.27E-04	< 1.83E-05			
01/20/2005 - 01/27/2005	< 1.27E-04	< 1.83E-05			
01/27/2005 - 02/03/2005	< 1.27E-04	< 1.82E-05			
Period #: 2					
02/03/2005 - 02/10/2005	< 1.27E-04	< 1.82E-05			
02/10/2005 - 02/17/2005	< 1.27E-04	< 1.83E-05			
02/17/2005 - 02/24/2005	< 1.27E-04	< 1.79E-05			
02/24/2005 - 03/03/2005	< 1.27E-04	< 1.85E-05			
Period #: 3					
03/03/2005 - 03/10/2005	< 1.27E-04	< 1.82E-05			
03/10/2005 - 03/17/2005	< 1.27E-04	< 1.83E-05			
03/17/2005 - 03/24/2005	< 1.27E-04	< 1.82E-05			
03/24/2005 - 03/31/2005	< 1.27E-04	< 1.82E-05			
Period #: 4					
03/31/2005 - 04/07/2005	< 1.27E-04	< 1.82E-05			
04/07/2005 - 04/14/2005	< 1.27E-04	< 1.81E-05			
04/14/2005 - 04/21/2005	< 1.27E-04	< 1.83E-05			
04/21/2005 - 04/28/2005	< 1.27E-04	< 1.82E-05			
Period #: 5					
04/28/2005 - 05/05/2005	< 1.27E-04	< 1.82E-05			
05/05/2005 - 05/12/2005	< 1.27E-04	< 1.82E-05			
05/12/2005 - 05/19/2005	< 1.27E-04	< 1.82E-05			
05/19/2005 - 05/26/2005	< 1.27E-04	< 1.82E-05			
05/26/2005 - 06/02/2005	< 1.27E-04	< 1.82E-05			
Period #: 6					
06/02/2005 - 06/09/2005	< 1.27E-04	< 1.82E-05			
06/09/2005 - 06/16/2005	< 1.27E-04	< 1.82E-05			
06/16/2005 - 06/23/2005	< 1.27E-04	< 1.82E-05			
06/23/2005 - 06/30/2005	< 1.27E-04	< 1.82E-05			

Footnotes: Permit Terms

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

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Sampling dates	Emissions (g)		Field	Comments	Analytical
	Weekly(1)	Daily(2)			
Period #: 7					
06/30/2005 - 07/07/2005	< 1.27E-04	< 1.82E-05			
07/07/2005 - 07/14/2005	< 1.27E-04	< 1.82E-05			
07/14/2005 - 07/21/2005	< 1.27E-04	< 1.82E-05			
07/21/2005 - 07/28/2005	< 1.27E-04	< 1.82E-05			
07/28/2005 - 08/04/2005	< 1.27E-04	< 1.80E-05			
Period #: 8					
08/04/2005 - 08/11/2005	< 1.27E-04	< 1.84E-05			
08/11/2005 - 08/18/2005	< 1.27E-04	< 1.82E-05			
08/18/2005 - 08/25/2005	< 1.27E-04	< 1.82E-05			
08/25/2005 - 09/01/2005	< 1.27E-04	< 1.83E-05			
Period #: 9					
09/01/2005 - 09/08/2005	< 1.27E-04	< 1.82E-05			
09/08/2005 - 09/15/2005	< 1.27E-04	< 1.83E-05			
09/15/2005 - 09/22/2005	< 1.27E-04	< 1.82E-05			
09/22/2005 - 09/29/2005	< 1.27E-04	< 1.82E-05			
Period #: 10					
09/29/2005 - 10/06/2005	< 1.27E-04	< 1.82E-05			
10/06/2005 - 10/13/2005	< 1.27E-04	< 1.82E-05			
10/13/2005 - 10/20/2005	< 1.27E-04	< 1.82E-05			
10/20/2005 - 10/27/2005	< 1.27E-04	< 1.82E-05*			
10/27/2005 - 11/03/2005	< 1.27E-04	< 1.83E-05			
Period #: 11					
11/03/2005 - 11/09/2005	< 1.27E-04	< 2.01E-05		Facility access restrictions. Sample to be changed a day earlier on 11/09/05.	
11/09/2005 - 11/17/2005	< 1.27E-04	< 1.66E-05		Facility access restrictions. Sample changed a day earlier on 11/09/05 and ran one day longer 11/17/05.	
11/17/2005 - 11/23/2005	< 1.27E-04	< 2.13E-05		Sample period 6 days due to Thanksgiving.	Quarter High; Annual High
11/23/2005 - 12/01/2005	< 1.27E-04	< 1.59E-05		Sample period 8 days due to Thanksgiving.	
Period #: 12					
12/01/2005 - 12/08/2005	< 1.27E-04	< 1.82E-05			
12/08/2005 - 12/15/2005	< 1.27E-04	< 1.82E-05			
12/15/2005 - 12/22/2005	1.42E-04	2.02E-05			

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Quarter $(1.27 * 10^{-4})(11) = 1.40 * 10^{-3}$
 $\frac{1.42 * 10^{-4}}{1.40 * 10^{-3}} < 1.54 * 10^{-3} \text{ g}$

Annual $(1.27 * 10^{-4})(50) = 6.35 * 10^{-3}$
 $\frac{1.42 * 10^{-4}}{6.35 * 10^{-3}} < 6.49 * 10^{-3} \text{ g}$

OK
 2/9/06