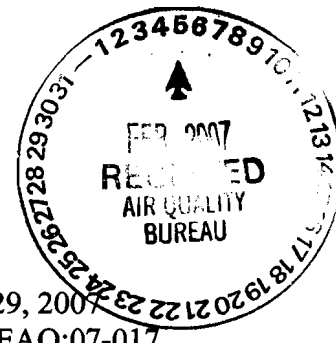




*Environmental Protection Division*  
Ecology & Air Quality Group  
PO Box 1663, MS J978  
Los Alamos, New Mexico 87545  
(505) 665-8855/Fax: (505) 665-8858



Date: January 29, 2007  
Refer to: ENV-EAQ:07-017

Mr. Edward Horst  
Manager, Enforcement  
New Mexico Environment Department  
Air Quality Bureau  
2048 Galisteo Street  
Santa Fe, New Mexico 87505

**IDEA ID 856 – Los Alamos National Laboratory**  
**2006 Fourth Quarter Beryllium Emissions Report**  
**October 1– December 31, 2006**  
**Air Quality Permit No. 634-M2**  
**Los Alamos National Laboratory**

Dear Mr. Horst:

Attached at Enclosure 1 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 2006**. 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 highest daily emission rate (HDER) during the Fourth quarter of calendar year 2006 was  $< 2.02 \times 10^{-5}$  grams per 24 hours, which is well below the daily permit limit. The total amount of beryllium emitted for the Fourth quarter of calendar year 2006 was  $< 1.48 \times 10^{-3}$  grams. Additionally, the total for the first four quarters of calendar year 2006 was  $< 6.44 \times 10^{-3}$  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 2006 is December 21, 2006. 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 2007 emission report for this facility. Based on the attached information, LANL is in compliance with condition #2 of NMED Air Quality Permit #634-M2.

Mr. Edward Horst  
ENV-EAQ:07-017  
LA-UR:07-0628

-2-

January 29, 2007

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 Kathleen Gorman-Bates at 665-1338.

Sincerely,



Dianne Wilburn  
Ecology & Air Quality Group

KGB:alb

Enc: a/s

Cy:

S. Fong, DOE-LA-AO, MS A316  
V. Bynum, PADOPS, MS A102  
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ENV-EAQ Beryllium Permit #634 Quarterly Report File  
ENV-EAQ File

LA-UR-07-0628

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*Title:* 2006 Fourth Quarter Beryllium Emissions Report  
October 1 - December 31, 2006  
Air Quality Permit No. 634-M2  
Los Alamos National Laboratory

*Author(s):* Kathleen Gorman-Bates, ENV-EAQ

*Intended for:* Mr. Edward Horst  
Manager, Enforcement  
New Mexico Environment Department  
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# Enclosure 1

**Beryllium 2006 Stack Emissions  
TA-03-0141**

**TA-3-141** StackID: 3014101  
Sampling dates

		Emissions (g)	
		Weekly(1)	Daily(2)
		<i>Sum of weekly results must be &lt;3.5 g/year</i>	<i>Cannot Exceed 0.35 g/day</i>
<b>Period #: 1</b>			
12/22/2005	01/05/2006	< 1.27E-04	< 9.10E-06
01/05/2006	01/12/2006	< 1.27E-04	< 1.82E-05
01/12/2006	01/19/2006	< 1.27E-04	< 1.82E-05
01/19/2006	01/26/2006	< 1.27E-04	< 1.82E-05
01/26/2006	02/02/2006	< 1.27E-04	< 1.82E-05
<b>Period 1 Sum: &lt; 6.35E-04</b>			
<b>Period #: 2</b>			
02/02/2006	02/09/2006	< 1.27E-04	< 1.82E-05
02/09/2006	02/16/2006	< 1.27E-04	< 1.82E-05
02/16/2006	02/23/2006	< 1.27E-04	< 1.82E-05
02/23/2006	03/02/2006	< 1.27E-04	< 1.81E-05
<b>Period 2 Sum: &lt; 5.08E-04</b>			
<b>Period #: 3</b>			
03/02/2006	03/09/2006	< 1.27E-04	< 1.83E-05
03/09/2006	03/16/2006	< 1.27E-04	< 1.83E-05
03/16/2006	03/23/2006	< 1.27E-04	< 1.82E-05
03/23/2006	03/30/2006	< 1.27E-04	< 1.82E-05
<b>Period 3 Sum: &lt; 5.08E-04</b>			
<b>1st Quarter Total: &lt; 1.65E-03</b>		<b>HDER*</b>	< 1.83E-05

Sample ran two weeks due to holiday.

\* HDER = Highest Daily Emission Rate

**Beryllium 2006 Stack Emissions**  
**TA-03-0141**

**TA-3-141 StackID: 3014101**

Sampling dates		Emissions (g)	
		Weekly(1)	Daily(2)
		<i>Sum of weekly results must be &lt;3.5 g/year</i>	<i>Cannot Exceed 0.35 g/day</i>
<b>Period #:</b>	<b>4</b>		
03/30/2006	-	04/06/2006	< 1.27E-04
04/06/2006	-	04/13/2006	< 1.27E-04
04/13/2006	-	04/20/2006	< 1.27E-04
04/20/2006	-	04/27/2006	< 1.27E-04
		<b>Period 4 Sum: &lt;</b>	<b>5.08E-04</b>
<b>Period #:</b>	<b>5</b>		
04/27/2006	-	05/04/2006	< 1.27E-04
05/04/2006	-	05/11/2006	< 1.27E-04
05/11/2006	-	05/18/2006	< 1.27E-04
05/18/2006	-	05/25/2006	< 1.27E-04
05/25/2006	-	06/01/2006	< 1.27E-04
		<b>Period 5 Sum: &lt;</b>	<b>6.35E-04</b>
<b>Period #:</b>	<b>6</b>		
06/01/2006	-	06/08/2006	< 1.27E-04
06/08/2006	-	06/15/2006	< 1.27E-04
06/15/2006	-	06/22/2006	< 1.27E-04
06/22/2006	-	06/29/2006	< 1.27E-04
		<b>Period 6 Sum: &lt;</b>	<b>5.08E-04</b>
		<b>2nd Quarter Total: &lt;</b>	<b>1.65E-03</b>
		<b>HDER &lt;</b>	<b>1.83E-05</b>

<sup>a</sup> HDER = Highest Daily Emission Rate

**Beryllium 2006 Stack Emissions  
TA-03-0141**

**TA-3-141 StackID: 3014101**

Sampling dates		Emissions (g)	
		Weekly(1)	Daily(2)
		<i>Sum of weekly results must be &lt;3.5 g/year</i>	<i>Cannot Exceed 0.35 g/day</i>
<b>Period #:</b>	<b>7</b>		
06/29/2006	-	07/06/2006	< 1.27E-04
07/06/2006	-	07/13/2006	< 1.27E-04
07/13/2006	-	07/20/2006	< 1.27E-04
07/20/2006	-	07/27/2006	< 1.27E-04
07/27/2006	-	08/03/2006	< 1.27E-04
		<b>Period 7 Sum:</b>	<b>&lt; 6.35E-04</b>
<b>Period #:</b>	<b>8</b>		
08/03/2006	-	08/10/2006	< 1.27E-04
08/10/2006	-	08/17/2006	< 1.27E-04
08/17/2006	-	08/24/2006	< 1.27E-04
08/24/2006	-	08/31/2006	< 1.27E-04
		<b>Period 8 Sum:</b>	<b>&lt; 5.08E-04</b>
<b>Period #:</b>	<b>9</b>		
08/31/2006	-	09/07/2006	< 1.27E-04
09/07/2006	-	09/14/2006	< 1.27E-04
09/14/2006	-	09/21/2006	< 1.27E-04
09/21/2006	-	09/28/2006	< 1.27E-04
		<b>Period 9 Sum:</b>	<b>&lt; 5.08E-04</b>
		<b>3rd Quarter Total:</b>	<b>&lt; 1.65E-03</b>
		<b>HDER</b>	<b>&lt; 1.87E-05</b>

<sup>a</sup> HDER = Highest Daily Emission Rate

**Beryllium 2006 Stack Emissions  
TA-03-0141**

**TA-3-141 StackID: 3014101**

<u>Sampling dates</u>		<u>Emissions (g)</u>	
		<u>Weekly(1)</u>	<u>Daily(2)</u>
		<i>Sum of weekly results must be &lt;3.5 g/year</i>	<i>Cannot Exceed 0.35 g/day</i>
<b>Period #:</b>	<b>10</b>		
09/28/2006	-	10/05/2006	< 1.27E-04
10/05/2006	-	10/12/2006	< 1.27E-04
10/12/2006	-	10/19/2006	< 1.27E-04
10/19/2006	-	10/26/2006	< 1.27E-04
10/26/2006	-	11/02/2006	< 1.27E-04
		<b>Period 10 Sum: &lt;</b>	<b>6.35E-04</b>
<b>Period #:</b>	<b>11</b>		
11/02/2006	-	11/09/2006	< 1.21E-04
11/09/2006	-	11/16/2006	< 1.21E-04
11/16/2006	-	11/22/2006	< 1.21E-04
11/22/2006	-	11/30/2006	< 1.21E-04
		<b>Period 11 Sum: &lt;</b>	<b>4.84E-04</b>
<b>Period #:</b>	<b>12</b>		
11/30/2006	-	12/07/2006	< 1.21E-04
12/07/2006	-	12/14/2006	< 1.21E-04
12/14/2006	-	12/21/2006	< 1.21E-04
		<b>Period 12 Sum: &lt;</b>	<b>3.63E-04</b>
		<b>4th Quarter Total: &lt;</b>	<b>1.48E-03</b>
		<b>HDER &lt;</b>	<b>2.02E-05</b>
		<b>Sum of four quarters: &lt;</b>	<b>6.44E-03</b>

Run time due to holiday.  
Run time due to holiday.

Run time due to two hour delay

<sup>a</sup> HDER = Highest Daily Emission Rate

*Signature*  
1/24/07