



Environmental Protection Division  
Environmental Stewardship Group  
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Date: November 4, 2010  
Refer to: ENV-ES: 10-207

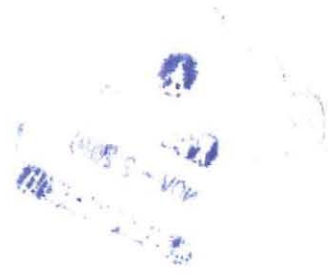
Compliance Reporting Manager  
New Mexico Environment Department  
Air Quality Bureau  
1301 Siler Road, Building B  
Santa Fe, New Mexico 87507

IDEA ID 856 – Los Alamos National Laboratory  
**2010 THIRD QUARTER BERYLLIUM EMISSIONS REPORT**  
**JULY 1– SEPTEMBER 30, 2010**  
**AIR QUALITY PERMIT NO. 634-M2**

Dear Compliance Reporting Manager:

Attached as Enclosure 1 you will find a copy of the 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 **third quarter of calendar year 2010**. 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 third quarter of calendar year 2010 was  $< 1.84 \times 10^{-5}$  grams per 24 hours, which is well below the daily permit limit. The total amount of beryllium emitted for the third quarter of calendar year 2010 was  $< 1.65 \times 10^{-3}$  grams. Additionally, the total for the first three quarters of calendar year 2010 is  $< 4.83 \times 10^{-3}$  grams, which is well below the 3.5 gram per year limit specified in the permit. Based on the attached information, LANL is in compliance with condition #2 of NMED Air Quality Permit #634-M2.



limit of  
of calendar  
year 20  
the daily  
quarter of

Compliance Reporting Manager  
ENV-ES:10-207  
LA-UR: 10-07221

-2-

November 4, 2010

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,



Patricia Gallagher  
Environmental Stewardship Group

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ENV-ES Beryllium Permit #634 Quarterly Report File  
ENV-ES File



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LA-UR-10-07221

Approved for public release;  
distribution is unlimited.

*Title:* 2010 Third Quarter Beryllium Emissions Report  
July 1 - September 30, 2010  
Air Quality Permit No. 634-M2  
Los Alamos National Laboratory

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

*Intended for:* Compliance Reporting Manager  
New Mexico Environment Department  
Air Quality Bureau  
1301 Siler Road; Building B  
Santa Fe, New Mexico 87507



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# Enclosure 1

*Beryllium 2010 Stack Emissions*  
TA-03-0141

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

Sampling dates

Sampling dates			Emissions (g)		Comments
			Weekly(1)	Daily(2)	
<b>Period #: 1</b>					
12/23/2009	-	1/7/2010	< 1.27E-04	< 8.65E-06	Run time due to holiday closure.
1/7/2010	-	1/14/2010	< 1.27E-04	< 1.81E-05	
1/14/2010	-	1/21/2010	< 1.27E-04	< 1.84E-05	
1/21/2010	-	1/28/2010	< 1.27E-04	< 1.82E-05	
1/28/2010	-	2/4/2010	< 1.27E-04	< 1.79E-05	Run time 2 hour delay start for snowy weather.
Period 1 Sum: <			6.35E-04		
<b>Period #: 2</b>					
2/4/2010	-	2/11/2010	< 1.27E-04	< 1.85E-05	
2/11/2010	-	2/18/2010	< 1.27E-04	< 1.82E-05	
2/18/2010	-	2/25/2010	< 1.27E-04	< 1.82E-05	
2/25/2010	-	3/4/2010	< 1.27E-04	< 1.82E-05	
Period 2 Sum: <			5.08E-04		
<b>Period #: 3</b>					
3/4/2010	-	3/11/2010	< 1.27E-04	< 1.82E-05	
3/11/2010	-	3/18/2010	< 1.27E-04	< 1.82E-05	Run time due to time change.
3/18/2010	-	3/25/2010	< 1.27E-04	< 1.82E-05	
3/25/2010	-	4/1/2010	< 1.27E-04	< 1.82E-05	
Period 3 Sum: <			5.08E-04		
1st Quarter Total: <			1.65E-03	"HDER <	1.85E-05

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



*Beryllium 2010 Stack Emissions*  
*TA-03-0141*

TA-3-141 StackID: 3014101

Sampling dates

Emissions (g)

Comments

Weekly(1)

Daily(2)

*Sum of weekly  
results must be  
<3.5 g/year*

*Cannot Exceed 0.35  
g/day*

Period #: 4

4/1/2010	-	4/8/2010	<	1.27E-04	<	1.82E-05
4/8/2010	-	4/15/2010	<	1.27E-04	<	1.80E-05
4/15/2010	-	4/22/2010	<	1.27E-04	<	1.84E-05
4/22/2010	-	4/29/2010	<	1.27E-04	<	1.82E-05

Period 4 Sum: < 5.08E-04

Period #: 5

4/29/2010	-	5/6/2010	<	1.27E-04	<	1.82E-05
5/6/2010	-	5/13/2010	1.91E-04		2.73E-05	
5/13/2010	-	5/20/2010	<	1.27E-04	<	1.83E-05
5/20/2010	-	5/27/2010	<	1.27E-04	<	1.81E-05
5/27/2010	-	6/3/2010	<	1.27E-04	<	1.83E-05

Period 5 Sum: < 5.08E-04

Period #: 6

6/3/2010	-	6/10/2010	<	1.27E-04	<	1.82E-05
6/10/2010	-	6/17/2010	<	1.27E-04	<	1.82E-05
6/17/2010	-	6/24/2010	<	1.27E-04	<	1.81E-05
6/24/2010	-	7/1/2010	<	1.27E-04	<	1.83E-05

Period 6 Sum: < 5.08E-04

2nd Quarter Total: <	1.52E-03	HDER <	1.34E-05
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<sup>a</sup>HDER = Highest Daily Emission Rate

*Beryllium 2010 Stack Emissions*  
TA-03-0141

TA-3-141 StackID: 3014101

Sampling dates			Emissions (g)		Comments
Period #:	7	8	Weekly(1) <i>Sum of weekly results must be &lt;3.5 g/year</i>	Daily(2) <i>Cannot Exceed 0.35 g/day</i>	
7/1/2010	-	7/8/2010	< 1.27E-04	< 1.83E-05	
7/8/2010	-	7/15/2010	< 1.27E-04	< 1.82E-05	Emission results from unplanned filter media damage.
7/15/2010	-	7/22/2010	< 1.27E-04	< 1.83E-05	Emission results from unplanned filter media damage.
7/22/2010	-	7/29/2010	< 1.27E-04	< 1.82E-05	
Period 7 Sum: <			5.08E-04		
7/29/2010	-	8/5/2010	< 1.27E-04	< 1.82E-05	
8/5/2010	-	8/12/2010	< 1.27E-04	< 1.81E-05	Emission results from unplanned power outage.
8/12/2010	-	8/19/2010	< 1.27E-04	< 1.83E-05	
8/19/2010	-	8/26/2010	< 1.27E-04	< 1.84E-05	Emission results from planned operation at facility.
08/26/2010	-	9/2/2010	< 1.27E-04	< 1.82E-05	
Period 8 Sum: <			6.35E-04		
9/2/2010	-	9/9/2010	< 1.27E-04	< 1.81E-05	
9/9/2010	-	9/16/2010	< 1.27E-04	< 1.82E-05	
9/16/2010	-	9/23/2010	< 1.27E-04	< 1.82E-05	
9/23/2010	-	9/30/2010	< 1.27E-04	< 1.82E-05	
Period 9 Sum: <			5.08E-04		
3rd Quarter Total: <			1.65E-03	HDER < 1.84E-05	

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