

Environmental Protection Division Ecology and Air Quality Group P.O. Box 1663, MS J978 Los Alamos, New Mexico 87545 (505) 665-8855/FAX: (505) 665-8858

Date: January 22, 2008 Refer to: ENV-EAQ:08-020

Ms. Debra McElroy
Manager, Compliance and Enforcement Program
New Mexico Environment Department
Air Quality Bureau
1301 Siler Road, Building B
Santa Fe, New Mexico 87507

IDEA ID 856 – LOS ALAMOS NATIONAL LABORATORY 2007 FOURTH QUARTER BERYLLIUM EMISSIONS REPORT OCTOBER 1– DECEMBER 31, 2007 AIR QUALITY PERMIT NO. 634-M2

Dear Ms. McElroy:

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 **fourth quarter of calendar year 2007**. 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 2007 was < 2.01 x 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 2007 was < 1.45 x 10⁻³ grams. Additionally, the total for the first four quarters of calendar year 2007 was < 6.31 x 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 2007 is December 20, 2007. 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 2008 emission report for this facility. Based on the attached information, LANL is in compliance with condition #2 of NMED Air Quality Permit #634-M2.

LA-UR:08-0444

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

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KGB/DW:alb

Enc: a/s

Cy:

Jan Van Prooyen, DIR, A100

Michael Mallory, PADOPS, A102

Richard Watkins, ADESH&Q, K491

IRM-RMSS0, A150

ESH&Q File, K491

S. Fong, DOE-LA-SO, A316

V. George, ENV-DO, J978

P. Dunn, MST-6, G770

S. Abeln, MST-6, G770

P. Wardwell, LC-ESH, A187

M. Gallegos, ENV-RCRA, E509

S. Story, ENV-EAQ, J978

M. Stockton, ENV-EAQ, J978

K.Gorman-Bates, ENV-EAQ, J978

ENV-EAQ Beryllium Permit #634 Quarterly Report File

ENV-EAQ File

LA-UR-08-0444

Approved for public release; distribution is unlimited.

Title:

2007 Fourth Quarter Beryllium Emissions Report

October 1 - December 31, 2007 Air Quality Permit No. 634-M2 Los Alamos National Laboratory

Author(s):

Kathleen Gorman-Bates, ENV-EAQ

Intended for:

Ms. Debra McElroy

Manager Compliance and Enforcement Program

New Mexico Environment Department

Air Quality Bureau

1301 Siler Road; Building B Santa Fe. New Mexico 87507



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Form 836 (7/06)

Enclosure 1

<u>TA-3-141</u> <u>StackID:</u> <u>3014101</u>

	Sampling dates	8		E	Comments		
,			Weekly(1) Sum of weekly results must be <3.5 g/year			Daily(2)	
					Ca	nnot Exceed 0.35 g/day	
-	Period #: 1						
12/21/2006	-	01/04/2007	<	1.21E-04	<	8.69E-06	Run time due to holiday.
01/04/2007	-	01/11/2007	<	1.21E-04	<	1.72E-05	
01/11/2007	-	01/18/2007	<	1.21E-04	<	1.75E-05	
01/18/2007	-	01/25/2007	<	1.21E-04	<	1,73E-05	
01/25/2007	-	02/01/2007	<	1.21E-04	<	1,73E-05	
			Period 1 Sum: <	6.05E-04			
	Period #: 2						
22/21/20		····					Duct work was performed during this
02/01/2007	-	02/08/2007		1.62E-04		2.31E-05	period. HVAC maintenance.
02/08/2007	-	02/15/2007	<	1.21E-04	<	1.70E-05	
02/15/2007	-	02/22/2007	<	1.21E-04	<	1.78E-05	Snow day two hour delay.
02/22/2007	-	03/01/2007	<	1.21E-04	<	1.73E-05	
			Period 2 Sum: <	5.25E-04			
Pei	riod #: 3						
03/01/2007	-	03/08/2007	<	1.21E-04	<	1.74E-05	
03/08/2007	_	03/15/2007		1.48E-04		2.11E-05	
03/15/2007	-	03/22/2007	<	1.21E-04	<	1.73E-05	
03/22/2007	_	03/29/2007	<	1.21E-04	<	1.74E-05	
			Period 3 Sum: <	5.11E-04			
		Γ-	1st Quarter Total: <	1.64E-03	HDER	2.31E-05	1

^a HDER = Highest Daily Emission Rate

<u>TA-3-141</u> <u>StackID: 3014101</u>

Sampling dates					Emissions (g)			
				-	Weekly(1)		,	Daily(2)
Period #:		4		,	Sum of weekly results must be <3.5 g/year		Cannot Exceed 0.35 g/day	
3/29/2007	~		04/05/2007	<	1.21E-04		<	1.73E-05
04/05/2007	-		04/12/2007	<	1.21E-04		<	1.74E-05
4/12/2007	-		04/19/2007	<	1.21E-04		<	1.73E-05
4/19/2007	-		04/26/2007	<	1.21E-04		<	1.73E-05
				Period 4 Sum: <	4.84E-04			
Pe	riod#:	5						
1/26/2007	-		05/03/2007	<	1.21E-04		<	1.73E-05
5/03/2007	-		05/10/2007	<	1.21E-04		<	1.73E-05
5/10/2007	-		05/17/2007	<	1.21E-04		<	1.72E-05
5/17/2007	-		05/24/2007	<	1.21E-04		<	1.74E-05
5/24/2007	-		05/31/2007	<	1.21E-04		<	1.73E-05
				Period 5 Sum: <	6.05E-04			
Pe	riod #:	6						
5/31/2007	-		06/07/2007	<	1.21E-04		<	1.73E-05
06/07/2007	-		06/14/2007	<	1.21E-04		<	1.73E-05
06/14/2007	-		06/21/2007	<	1.21E-04		<	1.73E-05
06/21/2007	-		06/28/2007	<	1.21E-04		<	1.73E-05
				Period 6 Sum: <	4.84E-04			
				2nd Quarter Total: <	1.57E-03	HDER	<	1.74E-05

^a HDER = Highest Daily Emission Rate

<u>TA-3-141</u> <u>StackID: 3014101</u>

Sampling dates					Emissions (g)			Comments	
Period #:				Weekly(1) Sum of weekly results must be <3.5 g/year			Daily(2)		
						Ca	nnot Exceed 0.35		
		7				g/day			
06/28/2007	-	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	07/05/2007	<	1.21E-04	<	1.70E-05		
07/05/2007	-		07/12/2007	<	1.21E-04	<	1.77E-05		
07/12/2007	**		07/19/2007	<	1.21E-04	<	1.74E-05		
07/19/2007	-		07/26/2007	<	1.21E-04	<	1.73E-05		
07/26/2007			08/02/2007	<	1.21E-04	<	1.69E-05		
				Period 7 Sum: <	6.05E-04				
Pe	riod #:	8							
08/02/2007		······	08/09/2007	<	1.21E-04	<	1.77E-05		
08/09/2007	-		08/16/2007	<	1.21E-04	<	1.74E-05	,	
08/16/2007			08/23/2007		1.89E-04		2.69E-05		
08/23/2007	-		08/30/2007	<	1.21E-04	<	1.74E-05		
				Period 8 Sum: <	5.52E-04				
Pe	riod #:	9							
08/30/2007	-		09/06/2007	<	1.21E-04	<	1.73E-05		
09/06/2007	-		09/13/2007	<	1.21E-04	<	1.71E-05		
09/13/2007	-		09/20/2007	<	1.21E-04	<	1.74E-05		
09/20/2007	-		09/27/2007	<	1.21E-04	<	1.76E-05		
				Period 9 Sum: <	4.84E-04				
				3rd Quarter Total: <	1.64E-03	HDER	2.69E-05		

^a HDER = Highest Daily Emission Rate

<u>TA-3-141</u> <u>StackID:</u> <u>3014101</u>

Sampling dates						Comments			
				Weekly(1)		Emissions (g) Daily(2)			-
Period #:		10			Sum of weekly results must be <3.5 g/year		Cannot Exceed 0.35 g/day		
9/27/2007	-		10/04/2007	<	1.21E-04		<	1.73E-05	
0/04/2007	-		10/11/2007	<	1.21E-04		<	1.73E-05	
0/11/2007	-		10/18/2007	<	1.21E-04		<	1.73E-05	
10/18/2007	-		10/25/2007	<	1,21E-04		<	1.73E-05	
0/25/2007	-		11/01/2007	<	1.21E-04		<	1.69E-05	
				Period 10 Sum; <	6.05E-04				
	riod #:	11	- Lumania						
11/01/2007	-		11/08/2007	<	1.21E-04		<	1.78E-05	
1/08/2007	-		11/15/2007	<	1.21E-04		<	1.73E-05	
									Run time due to Thanksgiving
1/15/2007	•		11/21/2007	<	1.21E-04		<	2.01E-05	holiday.
11/21/2007	•		11/29/2007	<	1.21E-04		<	1.52E-05	
D _o	riod #:	12		Period 11 Sum: <	4.84E-04				
	HOU #.	14	10 (0 < 10 0 o d						
1/29/2007	-		12/06/2007	·	1.21E-04		<	1.73E-05	
2/06/2007	-		12/13/2007	<	1.21E-04		<	1.73E-05	
12/13/2007	-		12/20/2007	<	1.21E-04		<	1.73E-05	
				Period 12 Sum: <	3.63E-04				1
			1	4th Quarter Total: <	1.45E-03	HDER	<	2.01E-05	
				Sum of four quarters: <	6.31E-03				15 6
			L ,						1.6/0

^a HDER = Highest Daily Emission Rate