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Date: August 13, 2010  
Refer to: ENV-ES: 10-156

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 SECOND QUARTER BERYLLIUM EMISSIONS REPORT**  
**APRIL 1– JUNE 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 **second 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 second 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 second quarter of calendar year 2010 was  $< 1.52 \times 10^{-3}$  grams. Additionally, the total for the first two quarters of calendar year 2010 is  $< 3.18 \times 10^{-3}$  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.



LA-UR-10-05202

*Approved for public release;  
distribution is unlimited.*

*Title:* 2010 Second Quarter Beryllium Emissions Report  
April 1 - June 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		Emissions (g)		Comments
		Weekly(1)	Daily(2)	
<b>Period #: 1</b>		<i>Sum of weekly results must be &lt;3.5 g/year</i>	<i>Cannot Exceed 0.35 g/day</i>	
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	<sup>a</sup> 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**

Sampling dates		Emissions (g)		Comments
		Weekly(1)	Daily(2)	
<b>Period #: 4</b>		<i>Sum of weekly results must be &lt;3.5 g/year</i>	<i>Cannot Exceed 0.35 g/day</i>	
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		
<b>Period #: 5</b>				
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		
<b>Period #: 6</b>				
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 <	1.84E-05

*Handwritten signature and date: 7/29/10*

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



**New Mexico Environment Department  
Air Quality Bureau  
Compliance and Enforcement Section  
1301 Siler Road Building B  
Santa Fe, NM 87507  
Phone (505) 476-4300 Fax (505) 476-4375**



Version 07.03.08

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## REPORTING SUBMITTAL FORM

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Staff	
Admin	

PLEASE NOTE: ® - Indicates required field

<b>SECTION I - GENERAL COMPANY AND FACILITY INFORMATION</b>						
A. ® Company Name: Los Alamos National Laboratory			D. ® Facility Name: Los Alamos National Laboratory			
B.1 ® Company Address: P. O. Box 1663 MS J978			E.1 ® Facility Address: Same as Company			
B.2 ® City: Los Alamos	B.3 ® State: NM	B.4 ® Zip: 87545	E.2 ® City:	E.3 ® State:	E.4 ® Zip:	
C.1 ® Company Environmental Contact: Patricia Gallagher		C.2 ® Title: Group Leader, ENV-ES	F.1 ® Facility Contact: Steve Story		F.2 ® Title: Team Leader, Compliance	
C.3 ® Phone Number: (505) 867-2278		C.4 ® Fax Number: (505) 665-8858	F.3 ® Phone Number: (505) 665-2169		F.4 ® Fax Number: (505) 665-8858	
C.5 ® Email Address: patg@lanl.gov			F.5 ® Email Address: story@lanl.gov			
G. Responsible Official: (Title V only): J. Chris Cantwell		H. Title: Associate Director, ESH&Q		I. Phone Number: (505) 606-2354	J. Fax Number: (505) 665-3811	
K. ® AI Number: 856	L. Title V Permit Number: P100R1	M. Title V Permit Issue Date: 08/07/2009		N. NSR Permit Number: 634-M2	O. NSR Permit Issue Date: 10/30/1998	
P. Reporting Period: From: 4/1/2010 To: 6/30/2010		OR	Q. Proposed Test Date: N/A		OR	R. Actual Test Date: N/A

<b>SECTION II - TYPE OF SUBMITTAL (check one that applies)</b>					
A. <input type="checkbox"/>	Title V Annual Compliance Certification	Permit Condition(s):	Description:		
B. <input type="checkbox"/>	Title V Semi-annual Monitoring Report	Permit Condition(s):	Description:		
C. <input type="checkbox"/>	NSPS Requirement (40CFR60)	Regulation:	Section(s):	Description:	
D. <input type="checkbox"/>	MACT Requirement (40CFR63)	Regulation:	Section(s):	Description:	
E. <input type="checkbox"/>	NMAC Requirement (20.2.xx) or NESHAP Requirement (40CFR61)	Regulation:	Section(s):	Description:	
F. <input checked="" type="checkbox"/>	Permit or Notice of Intent (NOI) Requirement	Permit No. <input checked="" type="checkbox"/> : or NOI No. <input type="checkbox"/> : 634-M2	Condition(s): 5.f	Description: Report beryllium emissions data by the continuous air monitor 60 days after Qtr.	
G. <input type="checkbox"/>	Requirement of an Enforcement Action	NOV No. <input type="checkbox"/> : or SFO No. <input type="checkbox"/> : or CD No. <input type="checkbox"/> : or Other <input type="checkbox"/> :	Section(s):	Description:	

<b>SECTION III - PERIODIC EMISSIONS TEST NOTIFICATIONS, TEST PROTOCOLS AND TEST REPORTS (if applicable)</b>					
T. <input type="checkbox"/>	A. Test Report <input type="checkbox"/> CMT: _____	B. Test Protocol <input type="checkbox"/>	C. Notification <input type="checkbox"/> CMT: _____	Description: (Emission Units to be Tested)	
	D. Test (EPA Methods) <input type="checkbox"/>	E. Test (EPA Methods) <input type="checkbox"/>	F. RATA Test <input type="checkbox"/>	G. Opacity Test <input type="checkbox"/>	H. Portable Analyzer (Periodic Test) <input type="checkbox"/>

<b>SECTION IV - CERTIFICATION</b>			
After reasonable inquiry, I <u>Patricia Gallagher</u> certify that the information in this submittal is true, accurate and complete. (name of reporting official)			
® Signature of Reporting Official: <i>Patricia Gallagher</i>	® Title: Group Leader, ENV-ES	® Date:	® Responsible Official for Title V? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

Reviewed By: \_\_\_\_\_

Date Reviewed: \_\_\_\_\_





ENV-ES-10-156



**Technical Information Release**  
SAFE-1 Classification Group

Reserved for Classification Group (SAFE-1)  <b>LA-UR 10-03202</b>  <b>LA-CP</b>		Submit to Classification Group (SAFE-1), MS F674, TA-3-1400, Rm 3475, the following, in order and clipped (not stapled) together: <input checked="" type="checkbox"/> This form, blocks 1-9 completed <input checked="" type="checkbox"/> Appropriate cover sheet (Form 836 for LA-UR, Form 1756a-e for LA-CP) <input checked="" type="checkbox"/> 1 copy of STI product Allow 3 days for Processing.		
1. Author(s) (Include all contributing authors; first must be LANL employee.)				
Last	First	Middle	Z No.	Group or affiliation
Gorman-Bates	Kathleen		107232	ENV-ES
2. Primary Responsible Author: My signature attests to the integrity and validity of the information provided on this form and the associated STI product, and affirms that all authors concur with its publication.				
Printed Name <i>Kathleen Gorman-Bates</i>		Signature <i>Kathleen Gorman-Bates</i>		Date <i>7/27/2010</i>
3. Document Title (use upper/lower case; spell out symbols) 2010 SECOND QUARTER BERYLLIUM EMISSIONS REPORT APRIL 1 - JUNE 30, 2010 AIR QUALITY PERMIT NO. 634-M2 LOS ALAMOS NATIONAL LABORATORY				
4. Page/Image Count Six				
5. Type of Information <input type="checkbox"/> Abstract <input type="checkbox"/> Full Paper/Report <input type="checkbox"/> Summary <input type="checkbox"/> Poster <input type="checkbox"/> Audio-Visual (abstract required) <input type="checkbox"/> Viewgraphs/Presentations (abstract required) <input checked="" type="checkbox"/> Other: <u>NMED Report</u>		Intended for: <input type="checkbox"/> Journal <input type="checkbox"/> Proceedings <input type="checkbox"/> Meeting/Conference <input type="checkbox"/> Book/Book Chapter <input type="checkbox"/> Electronic/World-wide Web <input checked="" type="checkbox"/> Other: <u>Compliance</u> Particulars: (see point # 4 of instruction sheet.) Meeting/Conf. Name: <u>Quarterly Compliance Reporting</u> City, State, and Country: <u>NMED, SANTA FE, NM</u> Mtg. Date: <u>N/A</u> Journal Name: <u>N/A</u> Other: <u>Compliance Report as required by NMED Air Quality Permit #634-M2</u>		
6. Research 5. Type of Information <input type="checkbox"/> DOE/LANL/LDRD <input type="checkbox"/> DHS <input type="checkbox"/> DOD <input checked="" type="checkbox"/> Other: <u>N/A</u>		Cost Center (Org./Group Code) and Program Code for this work: <u>8A010AWE71114</u> Related publication(s): <u>LA-UR-09-07215; LA-UR 10-00475</u>		
7. Deadline Date August 29, 2010		Z Number, name, e-mail, and phone number of contact for notification of release 232275, Michelle Martinez, 665-8855		
8. Classification Category (Cite applicable DUSA or obtain Derivative Classifier review)				
<input type="checkbox"/> Unclassified Applicable DUSA Designator:		<input checked="" type="checkbox"/> Unclassified <input type="checkbox"/> Classified <input type="checkbox"/> Unclassified, controlled; Category: _____ OR Derivative Classifier Name    Signature    Date <u>Steven Story</u> <i>SS</i> <u>7/29/10</u>		
9. Responsible Line Manager: Consistent with my responsibilities and authorities, my signature certifies that I have reviewed this STI product for professional, contractual, programmatic, institutional, OPSEC, and patent sensitivities, and that I concur with its publication.				
Printed Name <i>Patricia E. Gallagher</i>		Signature <i>Patricia E. Gallagher</i>		Date <u>8/2/10</u>
To be completed by Classification Group, SAFE-1				
Date Received	OSTI Category			Date Released
Classification Analyst Signature	Classification Category: <input type="checkbox"/> U <input type="checkbox"/> C <input type="checkbox"/> S <input type="checkbox"/> RD <input type="checkbox"/> FRD <input type="checkbox"/> NSI <input type="checkbox"/> UCNI <input type="checkbox"/> OOU <input type="checkbox"/> ECI <input type="checkbox"/> Other: _____			
Comments:				

