

## LA-UR-21-31152

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Title: IDEA ID 856 – Los Alamos National Laboratory 2021 Third Quarter Beryllium Emissions Report July 1–September 30, 2021, Air Quality Permit No. 634-M2

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**Environment, Safety, Health, Quality, Safeguards,  
 and Security (ESHQSS)**

**Symbol:** ESHQSS: 21-077  
**LAUR:** 21-31152  
**Date:** **NOV 09 2021**

Mr. David Feather  
 Compliance Reporting Manager  
 New Mexico Environment Department, Air Quality Bureau  
 525 Camino de los Marquez, Suite 1  
 Santa Fe, NM 87505-1816

**Subject: IDEA ID 856 – Los Alamos National Laboratory 2021 Third Quarter Beryllium Emissions Report July 1–September 30, 2021, Air Quality Permit No. 634-M2**

Dear Mr. Feather:

Attached is a copy of the sampling data for the **third quarter of calendar year 2021**. The attached emissions data were obtained from the continuous air monitor installed on the main exhaust stack at the Beryllium Technology Facility (BTF) at Los Alamos National Laboratory (LANL). This submission of the quarterly emissions data, collected from this source, is required by permit condition 5.f of the New Mexico Environment Department (NMED) New Source Review (NSR) Air Quality Permit #634-M2 dated October 30, 1998. This quarterly report is transmitted within the allowed 60 days after the end of the calendar quarter, as specified in NSR permit and incorporated in Title V permit P100-R2M4.

Air Quality Permit #634-M2 condition #2 requires that 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. For this reporting period, the current quarterly data and the total emissions for calendar year 2021 were obtained from the attached data sheet and summarized in the following table.

Reporting Period	Description of Data	Beryllium Emission Rate	NSR 634-M2/Title V P100-R2M4 Permit Limit
2021Q3	Highest daily emission rate	$1.80 \times 10^{-5}$ gm/24 hours	0.35 gm/24 hours
2021Q3	Total amount for 2021Q3	$1.61 \times 10^{-3}$ gm	N/A
2021Q3	Total amount for 2021	$4.82 \times 10^{-3}$ gm	3.5 gm/year

Based on the above summary table and Attachment 1 datasheet, the beryllium emissions are well below the permit limit and LANL is in compliance with condition #2 of NMED Air Quality Permit #634-M2.

If you have questions or comments regarding this submittal or would like to discuss this in greater detail, please feel free to contact Marjorie B. Stockton at (505) 665-3289 or Vincent A. Carretti at (505) 665-1658.

Sincerely,

Steven L. Story  
 Group Leader



Attachment(s): Attachment 1 Beryllium 2021 Stack Emissions

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**New Mexico Environment Department  
Air Quality Bureau  
Compliance and Enforcement Section  
525 Camino de los Marquez, Suite 1  
Santa Fe, NM 87505  
Phone (505) 476-4300**



Version 07.20.18

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TEMPO	

## REPORTING SUBMITTAL FORM

NMED USE ONLY	
Staff	
Admin	

PLEASE NOTE: ® - Indicates required field

SECTION I - GENERAL COMPANY AND FACILITY INFORMATION					
A. ® Company Name: Triad National Security, LLC			D. ® Facility Name: Los Alamos National Laboratory		
B.1 ® Company Address: P.O. Box 1663 MS K491			E.1 ® Facility Address: Same as Company		
B.2 ® City: Los Alamos	B.3 ® State: NM	B.4 ® Zip: 8 7 5 4 5	E.2 ® City:	E.3 ® State:	E.4 ® Zip:
C.1 ® Company Environmental Contact: Steven L. Story	C.2 ® Title: Group Leader, EPC-CP	F.1 ® Facility Contact: Marjorie B. Stockton	F.2 ® Title: Meteorology & Air Quality Team Leader		
C.3 ® Phone Number: (505) 665-2169	C.4 ® Fax Number: (505) 665-8858	F.3 ® Phone Number: (505) 665-3289	F.4 ® Fax Number: NA		
C.5 ® Email Address: story@lanl.gov			F.5 ® Email Address: mstockton@lanl.gov		
G. Responsible Official: (Title V only): Theodore A. Wyka		H. Title: Manager	I. Phone Number: (505) 667-5105	J. Fax Number: NA	
K. ® AI Number: 856	L. Title V Permit Number: P100-R2M4	M. Title V Permit Issue Date: 07/18/2019	N. NSR Permit Number: 634-M2	O. NSR Permit Issue Date: 10/30/1998	
P. Reporting Period: From: July 1, 2021 To: September 30, 2021					

Do NOT submit NSPS 0000 or 0000a well completion or flowback notifications to the Air Quality Bureau. See <https://www.env.nm.gov/air-quality/notices-and-faqs-for-compliance-and-enforcement/> for explanation.

SECTION II - TYPE OF SUBMITTAL (check one that applies)				
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: 2021Q3 Report containing beryllium emissions data from the continuous air monitor of the exhaust stack, due within 60 days after calendar quarter.
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:

SECTION III - CERTIFICATION			
After reasonable inquiry, I <u>Steven L. Story</u> certify that the information in this submittal is true, accurate and complete. (Name of Certifier)			
® Signature of Certifier: 	® Title: Group Leader, EPC-CP	® Date: 9 Nov 2021	® Responsible Official for Title V? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

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

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

# **Attachment 1**

## **Beryllium 2021 Stack Emissions**

ESHQSS: 21-077

LA-UR-21-31152

Date: NOV 09 2021

**Los Alamos National Laboratory  
TA-03-0141 Beryllium 2021 Stack Emissions**

**TA-03-0141    StackID: 03014101**

<b>Sampling dates</b>			<b>Emissions (g)</b>	
			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>			<hr/>	
12/22/2020	-	01/07/2021	< 1.22E-04	< 7.63E-06
01/07/2021	-	01/14/2021	< 1.22E-04	< 1.75E-05
01/14/2021	-	01/21/2021	< 1.22E-04	< 1.75E-05
01/21/2021	-	01/28/2021	< 1.22E-04	< 1.76E-05
01/28/2021	-	02/04/2021	< 1.22E-04	< 1.74E-05
			<b>Period 1 Sum: &lt; 6.10E-04</b>	
<b>Period #: 2</b>			<hr/>	
02/04/2021	-	02/11/2021	< 1.22E-04	< 1.75E-05
02/11/2021	-	02/18/2021	< 1.22E-04	< 1.71E-05
02/18/2021	-	02/25/2021	< 1.22E-04	< 1.80E-05
02/25/2021	-	03/04/2021	< 1.22E-04	< 1.75E-05
			<b>Period 2 Sum: &lt; 4.88E-04</b>	
<b>Period #: 3</b>			<hr/>	
03/04/2021	-	03/11/2021	< 1.24E-04	< 1.76E-05
03/11/2021	-	03/18/2021	< 1.24E-04	< 1.78E-05
03/18/2021	-	03/25/2021	< 1.24E-04	< 1.77E-05
03/25/2021	-	04/01/2021	< 1.24E-04	< 1.77E-05
			<b>Period 3 Sum: &lt; 4.96E-04</b>	
			<hr/>	
			<b>1st Quarter Total: 1.59E-03</b>	<b><sup>a</sup>HDER 1.80E-05</b>

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

**Los Alamos National Laboratory  
TA-03-0141 Beryllium 2021 Stack Emissions**

**TA-03-0141    StackID: 03014101**

<b>Sampling dates</b>			<b>Emissions (g)</b>	
			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 #: 4</b>			<hr/>	
04/01/2021	-	04/08/2021	< 1.24E-04	< 1.77E-05
04/08/2021	-	04/15/2021	< 1.24E-04	< 1.77E-05
04/15/2021	-	04/22/2021	< 1.24E-04	< 1.77E-05
04/22/2021	-	04/29/2021	< 1.24E-04	< 1.75E-05
			<b>Period 4 Sum: &lt; 4.96E-04</b>	
<b>Period #: 5</b>			<hr/>	
04/29/2021	-	05/06/2021	< 1.24E-04	< 1.80E-05
05/06/2021	-	05/13/2021	< 1.24E-04	< 1.77E-05
05/13/2021	-	05/20/2021	< 1.24E-04	< 1.76E-05
05/20/2021	-	05/27/2021	< 1.24E-04	< 1.76E-05
05/27/2021	-	06/03/2021	< 1.24E-04	< 1.79E-05
			<b>Period 5 Sum: &lt; 6.20E-04</b>	
<b>Period #: 6</b>			<hr/>	
06/03/2021	-	06/10/2021	< 1.24E-04	< 1.76E-05
06/10/2021	-	06/17/2021	< 1.24E-04	< 1.79E-05
06/17/2021	-	06/24/2021	< 1.24E-04	< 1.77E-05
06/24/2021	-	07/01/2021	< 1.24E-04	< 1.74E-05
			<b>Period 6 Sum: &lt; 4.96E-04</b>	
			<hr/>	
			<b>2nd Quarter Total: 1.61E-03                      <sup>a</sup>HDER 1.80E-05</b>	

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



**Los Alamos National Laboratory  
TA-03-0141 Beryllium 2021 Stack Emissions**

**TA-03-0141     StackID: 03014101**

<b>Sampling dates</b>			<b>Emissions (g)</b>	
			<b>Weekly(1)</b>	<b>Daily(2)</b>
			<i>Sum of weekly results must be &lt;3.5 g/year</i>	<i>Cannot Exceed 0.35 g/day</i>
<b>Period #: 7</b>			<hr/>	
07/01/2021	-	07/08/2021	< 1.24E-04	< 1.80E-05
07/08/2021	-	07/15/2021	< 1.24E-04	< 1.77E-05
07/15/2021	-	07/22/2021	< 1.24E-04	< 1.77E-05
07/22/2021	-	07/29/2021	< 1.24E-04	< 1.77E-05
			<b>Period 7 Sum: &lt; 4.96E-04</b>	
<b>Period #: 8</b>			<hr/>	
07/29/2021	-	08/05/2021	< 1.24E-04	< 1.77E-05
08/05/2021	-	08/12/2021	< 1.24E-04	< 1.77E-05
08/12/2021	-	08/19/2021	< 1.24E-04	< 1.77E-05
08/19/2021	-	08/26/2021	< 1.24E-04	< 1.77E-05
08/26/2021	-	09/02/2021	< 1.24E-04	< 1.77E-05
			<b>Period 8 Sum: &lt; 6.20E-04</b>	
<b>Period #: 9</b>			<hr/>	
09/02/2021	-	09/09/2021	< 1.24E-04	< 1.77E-05
09/09/2021	-	09/16/2021	< 1.24E-04	< 1.77E-05
09/16/2021	-	09/23/2021	< 1.24E-04	< 1.77E-05
09/23/2021	-	09/30/2021	< 1.24E-04	< 1.77E-05
			<b>Period 9 Sum: &lt; 4.96E-04</b>	
			<b>3rd Quarter Total: 1.61E-03                      <sup>a</sup>HDER 1.80E-05</b>	

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