

# LA-UR-22-27472

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**Title:** IDEA ID 856 - Los Alamos National Laboratory 2022 Second Quarter Beryllium Emissions Report April 1-June 30, 2022, Air Quality Permit No. 634-M2

**Author(s):** Carretti, Vincent Anthony

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

**Symbol:** ESHQSS: 22-035  
**LAUR:** 22-27472

**Date:** JUL 27 2022

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 2022 Second Quarter Beryllium Emissions Report April 1–June 30, 2022, Air Quality Permit No. 634-M2**

Dear Mr. Feather:

Attached is a copy of the sampling data for the **second quarter of calendar year 2022**. 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 2022 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
2022Q2	Highest daily emission rate	$2.35 \times 10^{-5}$ gm/24 hours	0.35 gm/24 hours
2022Q2	Total amount for 2022Q2	$1.66 \times 10^{-3}$ gm	N/A
2022Q2	Total amount for 2022	$3.15 \times 10^{-3}$ 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 2022 Stack Emissions

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Phone (505) 476-4300**



Version 07.20.18

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## REPORTING SUBMITTAL FORM

NMED USE ONLY	
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PLEASE NOTE: @ - Indicates required field

SECTION I - GENERAL COMPANY AND FACILITY INFORMATION					
<b>A. @ Company Name:</b> Triad National Security, LLC			<b>D. @ Facility Name:</b> Los Alamos National Laboratory		
<b>B.1 @ Company Address:</b> P.O. Box 1663 MS K491			<b>E.1 @ Facility Address:</b> Same as Company		
<b>B.2 @ City:</b> Los Alamos	<b>B.3 @ State:</b> NM	<b>B.4 @ Zip:</b> 8 7 5 4 5	<b>E.2 @ City:</b>	<b>E.3 @ State:</b>	<b>E.4 @ Zip:</b>
<b>C.1 @ Company Environmental Contact:</b> Steven L. Story	<b>C.2 @ Title:</b> Group Leader, EPC-CP		<b>F.1 @ Facility Contact:</b> Marjorie B. Stockton	<b>F.2 @ Title:</b> Meteorology & Air Quality Team Leader	
<b>C.3 @ Phone Number:</b> (505) 665-2169	<b>C.4 @ Fax Number:</b> (505) 665-8858		<b>F.3 @ Phone Number:</b> (505) 665-3289	<b>F.4 @ Fax Number:</b> NA	
<b>C.5 @ Email Address:</b> story@lanl.gov			<b>F.5 @ Email Address:</b> mstockton@lanl.gov		
<b>G. Responsible Official: (Title V onlv):</b> Theodore A. Wyka		<b>H. Title:</b> Manager	<b>I. Phone Number:</b> (505) 667-5105		<b>J. Fax Number:</b> NA
<b>K. @ AI Number:</b> 856	<b>L. Title V Permit Number:</b> P100-R2M4	<b>M. Title V Permit Issue Date:</b> 07/18/2019	<b>N. NSR Permit Number:</b> 634-M2	<b>O. NSR Permit Issue Date:</b> 10/30/1998	
<b>P. Reporting Period:</b> From: April 1, 2022 To: June 30, 2022					

Do NOT submit NSPS OOOO or OOOOa 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)				
<input type="checkbox"/>	<b>Title V Annual Compliance Certification</b>	<b>Permit Condition(s):</b>	<b>Description:</b>	
<input type="checkbox"/>	<b>Title V Semi-Annual Monitoring Report</b>	<b>Permit Condition(s):</b>	<b>Description:</b>	
<input type="checkbox"/>	<b>NSPS Requirement (40CFR60)</b>	<b>Regulation:</b>	<b>Section(s):</b>	<b>Description:</b>
<input type="checkbox"/>	<b>MACT Requirement (40CFR63)</b>	<b>Regulation:</b>	<b>Section(s):</b>	<b>Description:</b>
<input type="checkbox"/>	<b>NMAC Requirement (20.2.xx) or NESHAP Requirement (40CFR61)</b>	<b>Regulation:</b>	<b>Section(s):</b>	<b>Description:</b>
<input checked="" type="checkbox"/>	<b>Permit or Notice of Intent (NOI) Requirement</b>	Permit No. <input checked="" type="checkbox"/> or NOI No. <input type="checkbox"/> 634-M2	<b>Condition(s):</b> 5.f	<b>Description:</b> 2022Q2 Report containing beryllium emissions data from the continuous air monitor of the exhaust stack, due within 60 days after calendar quarter.
<input type="checkbox"/>	<b>Requirement of an Enforcement Action</b>	NOV No. <input type="checkbox"/> or SFO No. <input type="checkbox"/> or CD No. <input type="checkbox"/> or Other <input type="checkbox"/>	<b>Section(s):</b>	<b>Description:</b>

SECTION III - CERTIFICATION			
After reasonable inquiry, I <u>Steven L. Story</u> certify that the information in this submittal is true, accurate and complete. <small>(Name of Certifier)</small>			
<b>@ Signature of Certifier:</b> 	<b>@ Title:</b> Group Leader, EPC-CP	<b>@ Date:</b> 7/27/22	<b>@ Responsible Official for Title V?</b> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

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

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

# **Attachment 1**

## **Beryllium 2022 Stack Emissions**

**ESHQSS: 22-035**

**LA-UR-22-27472**

**Date: JUL 27 2022**

**Los Alamos National Laboratory  
TA-03-0141 Beryllium 2022 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/>	
12/21/2021	-	01/06/2022	< 1.24E-04	< 7.70E-06
01/06/2022	-	01/13/2022	< 1.24E-04	< 1.77E-05
01/13/2022	-	01/20/2022	< 1.24E-04	< 1.77E-05
01/20/2022	-	01/27/2022	< 1.24E-04	< 1.78E-05
01/27/2022	-	02/10/2022	< 1.24E-04	< 8.87E-06
			<b>Period 1 Sum: &lt; 6.20E-04</b>	
<b>Period #: 2</b>			<hr/>	
02/10/2022	-	02/17/2022	< 1.24E-04	< 1.75E-05
02/17/2022	-	02/24/2022	< 1.24E-04	< 1.79E-05
02/24/2022	-	03/03/2022	< 1.24E-04	< 1.77E-05
			<b>Period 2 Sum: &lt; 3.72E-04</b>	
<b>Period #: 3</b>			<hr/>	
03/03/2022	-	03/10/2022	< 1.24E-04	< 1.77E-05
03/10/2022	-	03/17/2022	< 1.24E-04	< 1.77E-05
03/17/2022	-	03/24/2022	< 1.24E-04	< 1.77E-05
03/24/2022	-	03/31/2022	< 1.24E-04	< 1.75E-05
			<b>Period 3 Sum: &lt; 4.96E-04</b>	
			<hr/>	
			<b>1st Quarter Total: 1.49E-03                      <sup>a</sup>HDER 1.79E-05</b>	

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

**Los Alamos National Laboratory  
TA-03-0141 Beryllium 2022 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/>	
03/31/2022	-	04/07/2022	< 1.24E-04	< 1.78E-05
04/07/2022	-	04/14/2022	< 1.24E-04	< 1.78E-05
04/14/2022	-	04/21/2022	< 1.24E-04	< 1.77E-05
04/21/2022	-	04/28/2022	1.65E-04	2.35E-05
			<b>Period 4 Sum: &lt; 5.37E-04</b>	
<b>Period #: 5</b>			<hr/>	
04/28/2022	-	05/05/2022	< 1.24E-04	< 1.79E-05
05/05/2022	-	05/12/2022	< 1.24E-04	< 1.77E-05
05/12/2022	-	05/19/2022	< 1.24E-04	< 1.78E-05
05/19/2022	-	05/26/2022	< 1.24E-04	< 1.77E-05
05/26/2022	-	06/02/2022	< 1.24E-04	< 1.77E-05
			<b>Period 5 Sum: &lt; 6.20E-04</b>	
<b>Period #: 6</b>			<hr/>	
06/02/2022	-	06/09/2022	1.31E-04	1.87E-05
06/09/2022	-	06/16/2022	< 1.24E-04	< 1.77E-05
06/16/2022	-	06/23/2022	< 1.24E-04	< 1.77E-05
06/23/2022	-	06/30/2022	< 1.24E-04	< 1.77E-05
			<b>Period 6 Sum: &lt; 5.03E-04</b>	
			<hr/>	
			<b>2nd Quarter Total: 1.66E-03</b>	<b><sup>a</sup>HDER 2.35E-05</b>

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