

## LA-UR-20-23293

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Title: IDEA ID 856 – Los Alamos National Laboratory 2020 First Quarter  
Beryllium Emissions Report January 1–March 31, 2020, Air Quality  
Permit No. 634-M2

Author(s): Carretti, Vincent Anthony

Intended for: Environmental Regulatory Document

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*Environment, Safety, Health, Quality,  
Safeguards, and Security*

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Los Alamos, New Mexico 87545  
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Symbol: ESHQSS: 20-016  
LAUR: 20-23293  
Locates Action No: N/A  
Date: 5/5/2020

Mr. Edward O'Brien  
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 2020 First Quarter Beryllium Emissions Report January 1–March 31, 2020, Air Quality Permit No. 634-M2**

Dear Mr. O'Brien:

Attached is a copy of the sampling data for the **first quarter of calendar year 2020**. 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 2020 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
2020Q1	Highest daily emission rate	$1.80 \times 10^{-5}$ gm/24 hours	0.35 gm/24 hours
2020Q1	Total amount for 2020Q1	$1.46 \times 10^{-3}$ gm	N/A
2020Q1	Total amount for 2020	$1.46 \times 10^{-3}$ 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 Aaron M. Dailey at (505) 667-7276 or Vincent A. Carretti at (505) 665-1658.

Sincerely,



Tania Van Valkenburg  
Group Leader

TVV/AMD/VAC:jdm

Attachment(s): Attachment 1 Beryllium 2020 Stack Emissions

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Version 07.20.18

**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**



NMED USE ONLY	
TEMPO	

## REPORTING SUBMITTAL FORM

NMED USE ONLY	
Staff	
Admin	

PLEASE NOTE: ® - Indicates required field

<b>SECTION I - GENERAL COMPANY AND FACILITY INFORMATION</b>					
<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>C.1 ® Company Environmental Contact:</b> Tania S. Van Valkenburg		<b>C.2 ® Title:</b> Group Leader, EPC-CP		<b>F.1 ® Facility Contact:</b> Aaron M. Dailey	
<b>C.3 ® Phone Number:</b> (505) 665-9827		<b>C.4 ® Fax Number:</b> (505) 665-8858		<b>F.2 ® Title:</b> Meteorology & Air Quality Team Leader	
<b>C.5 ® Email Address:</b> tauniav@lanl.gov			<b>F.3 ® Phone Number:</b> (505) 667-7276		
<b>G. Responsible Official: (Title V only):</b> Michael J. Weis			<b>H. Title:</b> Manager		<b>F.4 ® Fax Number:</b> NA
<b>I. Phone Number:</b> (505) 667-5015		<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: January 1, 2020 To: March 31, 2020					

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.

<b>SECTION II - TYPE OF SUBMITTAL (check one that applies)</b>					
<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>	<b>Permit No. ®:</b> or <b>NOI No. □:</b> 634-M2	<b>Condition(s):</b> 5.f	<b>Description:</b> 2020Q1 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>	<b>NOV No. □:</b> or <b>SFO No. □:</b> or <b>CD No. □:</b> or <b>Other □:</b>	<b>Section(s):</b>	<b>Description:</b>	

<b>SECTION III - CERTIFICATION</b>			
After reasonable inquiry, I <u>Tania S. Van Valkenburg</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> 5/5/2020	<b>® Responsible Official for Title V?</b> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

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

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

# Attachment 1

## Beryllium 2020 Stack Emissions

ESHQSS: 20-016

LA-UR-20-23293

Date: 5/5/2020

**Los Alamos National Laboratory  
TA-03-0141 Beryllium 2020 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 #: 1</b>			<hr/>	
12/19/2019	-	01/09/2020	< 1.22E-04	< 5.84E-06
01/09/2020	-	01/16/2020	< 1.22E-04	< 1.70E-05
01/16/2020	-	01/23/2020	< 1.22E-04	< 1.80E-05
01/23/2020	-	01/30/2020	< 1.22E-04	< 1.74E-05
			<b>Period 1 Sum: &lt; 4.88E-04</b>	
<b>Period #: 2</b>			<hr/>	
01/30/2020	-	02/06/2020	< 1.22E-04	< 1.76E-05
02/06/2020	-	02/13/2020	< 1.22E-04	< 1.75E-05
02/13/2020	-	02/20/2020	< 1.22E-04	< 1.75E-05
02/20/2020	-	02/27/2020	< 1.22E-04	< 1.75E-05
			<b>Period 2 Sum: &lt; 4.88E-04</b>	
<b>Period #: 3</b>			<hr/>	
02/27/2020	-	03/05/2020	< 1.22E-04	< 1.75E-05
03/05/2020	-	03/12/2020	< 1.22E-04	< 1.75E-05
03/12/2020	-	03/19/2020	< 1.22E-04	< 1.75E-05
03/19/2020	-	03/31/2020	< 1.22E-04	< 1.00E-05
			<b>Period 3 Sum: &lt; 4.88E-04</b>	

<b>1st Quarter Total: 1.46E-03</b>	<b><sup>a</sup>HDER 1.80E-05</b>
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<sup>a</sup> HDER = Highest Daily Emission Rate