LA-UR-24-20837

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Title:	IDEA ID 856 - Los Alamos National Laboratory 2023 Fourth Quarter Beryllium Emissions Report October 1-December 31, 2023, Air Quality Permit No. 634-M2
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Environmental Protection & Compliance Division
Compliance Programs Group

Symbol: EPC-DO: 24-044
LA-UR: 24-20837
Locates: N/A
Date: JAN 31 2024

Mr. Shea Schleman
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 2023 Fourth Quarter Beryllium Emissions Report October 1-December 31, 2023, Air Quality Permit No. 634-M2

Dear Mr. Schleman:

Attached is a copy of the sampling data for the **fourth quarter of calendar year 2023.** 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-R2M5.

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 2023 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-R2M5 Permit Limit
2023Q4	Highest daily emission rate	1.41×10^{-4} gm/24 hours	0.35 gm/24 hours
2023Q4	Total amount for 2023Q4	8.27×10^{-3} gm	N/A
2023Q4	Total amount for 2023	3.51×10^{-2} gm	3.5 gm/year

In addition, on the Attachment 1 datasheet, you will note that the last data point for calendar year 2023 is December 21, 2023. 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 2024 emission report for this facility. 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,

SARAH HOLCOMB (Affiliate)
Digitally signed by SARAH HOLCOMB (Affiliate)
Date: 2024.01.31 07:44:12 -07'00'

Sarah S. Holcomb
Acting Group Leader

Attachment(s): Attachment 1 Beryllium 2023 Stack Emissions

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Version 07.20.18

NMED USE ONLY	
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:** 87545	**E.2 ® City:**	**E.3 ® State:**	**E.4 ® Zip:**
C.1 ® Company Environmental Contact: Sarah S. Holcomb	**C.2 ® Title:** Acting Group Leader, EPC-CP		**F.1 ® Facility Contact:** Marjorie B. Stockton	**F.2 ® Title:** Meteorology & Air Quality Team Leader	
C.3 ® Phone Number: (505) 396-0866	**C.4 ® Fax Number:** NA		**F.3 ® Phone Number:** (505) 665-3289	**F.4 ® Fax Number:** NA	
C.5 ® Email Address: sholcomb@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:	**L. Title V Permit Number:**	**M. Title V Permit Issue Date:**	**N. NSR Permit Number:**	**O. NSR Permit Issue Date:**
856	P100-R2M5	10/02/2023	634-M2	10/30/1998

P. Reporting Period: From: October 1, 2023 To: December 31, 2023

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)

A. ☐	**Title V Annual Compliance Certification**	**Permit Condition(s):**	**Description:**	
B. ☐	**Title V Semi-Annual Monitoring Report**	**Permit Condition(s):**	**Description:**	
C. ☐	**NSPS Requirement (40CFR60)**	**Regulation:**	**Section(s):**	**Description:**
D. ☐	**MACT Requirement (40CFR63)**	**Regulation:**	**Section(s):**	**Description:**
E. ☐	**NMAC Requirement (20.2.xx) or NESHAP Requirement (40CFR61)**	**Regulation:**	**Section(s):**	**Description:**
F. ☒	**Permit or Notice of Intent (NOI) Requirement**	**Permit No. ☒: or NOI No. ☐:** 634-M2	**Condition(s):** 5.f	**Description:** 2023Q4 Report containing beryllium emissions data from the continuous air monitor of the exhaust stack, due within 60 days after calendar quarter.
G. ☐	**Requirement of an Enforcement Action**	**NOV No. ☐: or SFO No. ☐: or CD No. ☐: or Other ☐:**	**Section(s):**	**Description:**

SECTION III - CERTIFICATION

After reasonable inquiry, I Sarah S. Holcomb **(Name of Certifier) certify that the information in this submittal is true, accurate and complete.**

® Signature of Certifier:	**® Title:**	**® Date**	**® Responsible Official for Title V?**
SARAH HOLCOMB (Affiliate) Digitally signed by SARAH HOLCOMB (Affiliate) Date: 2024.01.31 07:43:50 -07'00'	**Acting Group Leader, EPC-CP**	1/31/24	☐ Yes ☒ No

Reviewed By: _____ Date Reviewed: _____

ATTACHMENT 1

Beryllium 2023 Stack Emissions

EPC-DO: 24-044

LAUR: 24-20837

Date: JAN 31 2024

Los Alamos National Laboratory
TA-03-0141 Beryllium 2023 Stack Emissions

TA-03-0141 StackID: 03014101

Sampling dates			Emissions (g)	
			Weekly(1)	Daily(2)
			Sum of weekly results must be <3.5 g/year	*Cannot Exceed 0.35 g/day*
Period #:		**1**		
12/22/2022	-	01/05/2023	< 6.89E-04	< 4.91E-05
01/05/2023	-	01/12/2023	< 6.89E-04	< 9.87E-05
01/12/2023	-	01/19/2023	< 6.89E-04	< 9.86E-05
01/19/2023	-	01/26/2023	< 6.89E-04	< 9.83E-05
01/26/2023	-	02/02/2023	< 6.89E-04	< 9.86E-05
			Period 1 Sum: < 3.45E-03	
Period #:		**2**		
02/02/2023	-	02/09/2023	< 6.89E-04	< 9.83E-05
02/09/2023	-	02/16/2023	< 6.89E-04	< 9.99E-05
02/16/2023	-	02/23/2023	< 6.89E-04	< 9.67E-05
02/23/2023	-	03/06/2023	< 6.89E-04	< 6.26E-05
			Period 2 Sum: < 2.76E-03	
Period #:		**3**		
03/06/2023	-	03/09/2023	< 6.89E-04	< 2.31E-04
03/09/2023	-	03/16/2023	< 6.89E-04	< 9.83E-05
03/16/2023	-	03/23/2023	< 6.89E-04	< 9.85E-05
03/23/2023	-	03/30/2023	< 6.89E-04	< 1.00E-04
			Period 3 Sum: < 2.76E-03	

1st Quarter Total: 8.96E-03 **[a]HDER 2.31E-04**

[a] HDER = Highest Daily Emission Rate

Los Alamos National Laboratory
TA-03-0141 Beryllium 2023 Stack Emissions

TA-03-0141 StackID: 03014101

Sampling dates			Emissions (g)	
			Weekly(1)	Daily(2)
			Sum of weekly results must be <3.5 g/year	*Cannot Exceed 0.35 g/day*
Period #:		**4**		
03/30/2023	-	04/06/2023	< 6.89E-04	< 9.71E-05
04/06/2023	-	04/13/2023	< 6.89E-04	< 9.74E-05
04/13/2023	-	04/20/2023	< 6.89E-04	< 9.95E-05
04/20/2023	-	04/27/2023	< 6.89E-04	< 9.84E-05
04/27/2023		05/04/2023	< 6.89E-04	< 9.85E-05
			Period 4 Sum: < 3.45E-03	
Period #:		**5**		
05/04/2023	-	05/11/2023	< 6.89E-04	< 9.81E-05
05/11/2023	-	05/18/2013	< 6.89E-04	< 9.82E-05
05/18/2013	-	05/25/2023	< 6.89E-04	< 9.90E-05
05/25/2023	-	06/01/2023	< 6.89E-04	< 9.82E-05
			Period 5 Sum: < 2.76E-03	
Period #:		**6**		
06/01/2023	-	06/08/2023	< 6.89E-04	< 9.79E-05
06/08/2023	-	06/15/2023	< 6.89E-04	< 1.00E-04
06/15/2023	-	06/22/2023	< 6.89E-04	< 9.61E-05
06/22/2023	-	06/29/2023	< 6.89E-04	< 9.85E-05
			Period 6 Sum: < 2.76E-03	

2nd Quarter Total: 8.96E-03 **[a]HDER 1.00E-04**

[a] HDER = Highest Daily Emission Rate

Los Alamos National Laboratory
TA-03-0141 Beryllium 2023 Stack Emissions

TA-03-0141 StackID: 03014101

Sampling dates			Emissions (g)	
			Weekly(1)	Daily(2)
			Sum of weekly results must be <3.5 g/year	*Cannot Exceed 0.35 g/day*
Period #:		**7**		
06/29/2023	-	07/06/2023	< 6.89E-04	< 9.83E-05
07/06/2023	-	07/13/2023	< 6.89E-04	< 9.82E-05
07/13/2023	-	07/20/2023	< 6.89E-04	< 9.89E-05
07/20/2023	-	07/27/2023	< 6.89E-04	< 9.89E-05
07/27/2023	-	08/03/2023	< 6.89E-04	< 9.82E-05
			Period 7 Sum: < 3.45E-03	
Period #:		**8**		
08/03/2023	-	08/10/2023	< 6.89E-04	< 9.85E-05
08/10/2023	-	08/17/2023	< 6.89E-04	< 9.80E-05
08/17/2023	-	08/24/2023	< 6.89E-04	< 9.87E-05
08/24/2023	-	08/31/2023	< 6.89E-04	< 9.86E-05
			Period 8 Sum: < 2.76E-03	
Period #:		**9**		
08/31/2023	-	09/07/2023	< 6.89E-04	< 9.84E-05
09/07/2023	-	09/14/2023	< 6.89E-04	< 9.85E-05
09/14/2023	-	09/21/2023	< 6.89E-04	< 9.84E-05
09/21/2023	-	09/28/2023	< 6.89E-04	< 9.78E-05
			Period 9 Sum: < 2.76E-03	

3rd Quarter Total: 8.96E-03 **[a]HDER 9.89E-05**

[a] HDER = Highest Daily Emission Rate

Los Alamos National Laboratory
TA-03-0141 Beryllium 2023 Stack Emissions

TA-03-0141 StackID: 03014101

Sampling dates			Emissions (g)	
			Weekly(1)	Daily(2)
			Sum of weekly results must be <3.5 g/year	*Cannot Exceed 0.35 g/day*
Period #:		**10**		
09/28/2023	-	10/05/2023	< 6.89E-04	< 9.90E-05
10/05/2023	-	10/12/2023	< 6.89E-04	< 9.83E-05
10/12/2023	-	10/19/2023	< 6.89E-04	< 9.79E-05
10/19/2023	-	10/26/2023	< 6.89E-04	< 9.88E-05
10/26/2023	-	11/02/2023	< 6.89E-04	< 9.80E-05
			Period 10 Sum: < 3.45E-03	
Period #:		**11**		
11/02/2023	-	11/09/2023	< 6.89E-04	< 1.00E-04
11/09/2023	-	11/16/2023	< 6.89E-04	< 9.65E-05
11/16/2023	-	11/21/2023	< 6.89E-04	< 1.41E-04
11/21/2023	-	11/30/2023	< 6.89E-04	< 7.56E-05
			Period 11 Sum: < 2.76E-03	
Period #:		**12**		
11/30/2023	-	12/07/2023	< 6.89E-04	< 9.85E-05
12/07/2023	-	12/13/2023	< 6.89E-04	< 1.17E-04
12/13/2023	-	12/21/2023	< 6.89E-04	< 8.51E-05
			Period 12 Sum <: 2.07E-03	

4th Quarter Total: 8.27E-03	**[a]HDER 1.41E-04**
Sum of Four Quarters: 3.51E-02	

[a] HDER = Highest Daily Emission Rate