LA-UR-24-28560

Approved for public release; distribution is unlimited.

Title: IDEA ID 856 - Los Alamos National Laboratory 2024 Second Quarter

Beryllium Emissions Report April 1-June 30, 2024, Air Quality Permit

No. 634-M2

Author(s): Carretti, Vincent Anthony

Intended for: Environmental Regulatory Document

Issued: 2024-08-14 (rev.1)









Los Alamos National Laboratory, an affirmative action/equal opportunity employer, is operated by Triad National Security, LLC for the National Nuclear Security Administration of U.S. Department of Energy under contract 89233218CNA000001. By approving this article, the publisher recognizes that the U.S. Government retains nonexclusive, royalty-free license to publish or reproduce the published form of this contribution, or to allow others to do so, for U.S. Government purposes. Los Alamos National Laboratory requests that the publisher dientify this article as work performed under the auspices of the U.S. Department of Energy. Los Alamos National Laboratory strongly supports academic freedom and a researcher's right to publish; as an institution, however, the Laboratory does not endorse the viewpoint of a publication or guarantee its technical correctness.



Environmental Protection & Compliance Division Compliance Programs Group

Los Alamos National Laboratory P.O. Box 1663, MS K491 Los Alamos, NM 87545 505-667-4218

Symbol: EPC-DO: 24-214 **LA-UR:** 24-28560

Locates: N/A

Date: AUG 13 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 2024 Second Quarter Beryllium Emissions Report April 1-June 30, 2024, Air Quality Permit No. 634-M2

Dear Mr. Schleman:

Attached is a copy of the sampling data for the **second quarter of calendar year 2024.** 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 2024 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
2024Q2	Highest daily emission rate	9.93 x 10 ⁻⁵ gm/24 hours	0.35 gm/24 hours
2024Q2	Total amount for 2024Q2	8.22 x 10 ⁻³ gm	N/A
2024Q2	Total amount for 2024	1.78 x 10 ⁻² 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 Heather C. Seus at (505) 412-8832 or Vincent A. Carretti at (505) 665-1658.



Sincerely,

SARAH HOLCOMB Digitally signed by SARAH HOLCOMB (Affiliate)
(Affiliate)
Date: 2024.08.13 09:06:24
-06'00'

Sarah S. Holcomb Group Leader

Attachment(s): Attachment 1 Beryllium 2024 Stack Emissions

Copy: Karen E. Armijo, NA-LA, karen.armijo@nnsa.doe.gov Robert A. Gallegos, NA-LA, robert.gallegos@nnsa.doe.gov James P. Johnson, Triad, DDOPS, jpj@lanl.gov Valerie A. Huerta, Triad, STO-PHX, vahuerta@lanl.gov Daniel L. Zelic, Triad, STO-PHX, dzelic@lanl.gov Jesse P. Johnson, Triad, STO-PHX, jxj@lanl.gov Steven A. Coleman, Triad, ALDESHQ, scoleman@lanl.gov Jennifer E. Payne, Triad, ALDESHQ, jpayne@lanl.gov Jeannette T. Hyatt, Triad, EWP, jhyatt@lanl.gov Steven L. Story, Triad, EPC-DO, story@lanl.gov Katherine J. W. Higgins, Triad, EPC-DO, kwurden@lanl.gov Sarah S. Holcomb, Triad, EPC-CP, sholcomb@lanl.gov Andrew G. Thiros, Triad, GC-ESH, thiros@lanl.gov Lydia E. Martinez, Triad, EPC-CP, lydia@lanl.gov Mona M. Michaelis, Triad, EPC-CP, mmichaelis@lanl.gov Heather C. Seus, Triad, EPC-CP, heatherseus@lanl.gov Vincent A. Carretti, Triad, EPC-CP, vcarretti@lanl.gov Triad, EPC-CP Beryllium Permit #634-M2 Quarterly Report File gc-esh@lanl.gov aldeshqcorrespondence@lanl.gov epccorrespondence@lanl.gov eshq-dcrm@lanl.gov





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

Date Reviewed:

Version 07.20.18

NMED USE ONLY

Reviewed By:

TEMPO		REPORTI	N(G SUB	MITT	'AL FO	\mathbf{RM}	Staff		
ı LIVII (Admin		
	OTE: ® - Indicates required field									
	ION I - GENERAL COM	PANY AND FAC	ILITY	INFOR						
A. ® Company Name: Triad National Security, LLC				D. ® Facility Name: Los Alamos National Laboratory						
B.1 ® Company Address: P.O. Box 1663				E.1 ® Facility Address: Same as Company						
MS K49	91								T	
B.2 ® City: Los Alamos		B.3 ® State: B.4 ® Zip: 8 7 5 4 5				E.3 ® State: E.4 ® Zip:				
C.1 ® Company Environmental Contact: Sarah S. Holcomb		C.2 ® Title: Group Leader, EPC-CP		F.1 ® Facility Contact: Heather C. Seus		F.2 ® Title: Meteorology & Air Quality Team Leader				
C.3 ® P (505) 39	hone Number: 6-0866	C.4 ® Fax Number: NA		F.3 ® Phone Number: (505) 412-8832			F.4 ® Fax Number: NA			
C.5 ® E	Email Address: nb@lanl.gov			F.5 ® Email Address: heatherseus@lanl.gov		1				
	onsible Official: (Title V onlv): re A. Wyka	H. Title: Manager		I. Phone N (505) 667-			J. Fax N u NA	ımber:		
856	P100-R2M		M. Title 10/02/2	e V Permit Is 2023	sue Date:	N. NSR Perr 634-M2	mit Number:		SR Permit Is 0/1998	sue Date:
P. Repo	orting Period: April 1, 2024 To:	June 30, 2024						·		
Do NOT	Submit NSPS OOOO or OOOOaccompliance-and-enforcement/ for	well completion or flow	wback	notifications	to the Air Q	uality Bureau. S	See https://www.	.env.nm.gov/	air-quality/not	ices-and-
	ON II – TYPE OF SUBM		ne tha	at applie	s)					
A .	Title V Annual Compliance Certification	Permit Condition(s)		Description	,					
В. 🗌	Title V Semi-Annual Monitoring Report	Permit Condition(s): Description		Description	on:					
C. NSPS Requirement (40CFR60)		Section(s): Description:								
D. 🗌	MACT Requirement (40CFR63)	Regulation:		Section(s)		Descripti	Description:			
E. 🗌	NinAo Requirement		Section(s)	Description:						
		Permit No.⊠: or NOI N	o. 🗆 :	Condition(s):	Descripti	on:			
F. 🔀	Permit or Notice of Intent (NOI) Requirement	634-M2	,	5.f		continuou	Report containi is air monitor o r calendar qua	f the exhau		
		NOV No. ☐: or SFO No. ☐: Section(s		Section(s)	s): Description:					
G	Requirement of an Enforcement Action	or CD No. □: or Other	□:							
OF OT	TON III. CERTIFICATIO									
	ION III - CERTIFICATIO	Sarah S. Holcomb		00-41	fu that the	nformation	n this submitt	alie true a	courate and	complete
	. ,,	(Name of Certifier)	,			inomiation if				•
_	ature of Certifier: Digitally sign	ned by SARAH HOLCOMB		® Tit			® Date	®	Responsible Offi	
SARAH HOLCOMB (Affiliate) (Affiliate) (Affiliate) (Date: 2024.08.13 09:07:09 -06'00'			Group Leader, EPC-CP 8/13/24		8/13/24		Yes	⊠ No		

ATTACHMENT 1

Beryllium 2024 Stack Emissions

EPC-DO: 24-214

LAUR: 24-28560

Date: _____AUG 13 2024

Los Alamos National Laboratory TA-03-0141 Beryllium 2024 Stack Emissions

<u>TA-03-0141</u> <u>StackID:</u> <u>03014101</u>

Sa	ampling dates		Emissions (g)		
		Weekly(1)	Daily(2)		
		Sum of weekly results must be <3.5 g/year	Cannot Exceed 0.3 g/day		
Period		(007 04	4.500.05		
12/21/2023 -	01/05/2024	< 6.89E-04	< 4.53E-05		
01/05/2024 -	01/11/2024	< 6.89E-04	< 1.15E-04		
01/11/2024 -	01/18/2024	< 6.89E-04	< 1.00E-04		
01/18/2024 -	01/25/2024	< 6.89E-04	< 1.00E-04		
01/25/2024 -	02/01/2024	< 6.89E-04	< 9.86E-05		
		Period 1 Sum: < 3.45E-03			
Period	#: 2				
02/01/2024 -	02/08/2024	< 6.89E-04	< 9.83E-05		
02/08/2024 -	02/15/2024	< 6.89E-04	< 9.83E-05		
02/15/2024 -	02/22/2024	< 6.89E-04	< 9.84E-05		
02/22/2024 -	02/29/2024	< 6.89E-04	< 9.85E-05		
		Period 2 Sum: < 2.76E-03			
Period	#: 3				
02/29/2024 -	03/07/2024	< 6.76E-04	< 9.65E-05		
03/07/2024 -	03/14/2024	< 6.76E-04	< 9.65E-05		
03/14/2024 -	03/21/2024	< 6.76E-04	< 9.69E-05		
03/21/2024 -	03/28/2024	< 6.76E-04	< 9.66E-05		
03/28/2024 -	04/04/2024	< 6.76E-04	< 9.64E-05		
		Period 3 Sum: < 3.38E-03			
		1st Quarter Total: 9.58E-03	^a HDER 1.15E-04		

^a HDER = Highest Daily Emission Rate

Los Alamos National Laboratory TA-03-0141 Beryllium 2024 Stack Emissions

<u>TA-03-0141</u> <u>StackID:</u> <u>03014101</u>

Sampling dates		dates	<u> </u>	Emissions (g)		
			Weekly(1)	Daily(2)		
			Sum of weekly results must be <3.5 g/year	Cannot Exceed 0.3 g/day		
	Period #:	4				
04/04/2024	-	04/11/2024	< 6.76E-04	< 9.67E-05		
04/11/2024	-	04/18/2024	< 6.76E-04	< 9.69E-05		
04/18/2024	-	04/25/2024	< 6.76E-04	< 9.63E-05		
04/25/2024	-	05/02/2024	< 6.76E-04	< 9.67E-05		
			Period 4 Sum: < 2.70E-03			
	Period #:	5				
05/02/2024	-	05/09/2024	< 6.90E-04	< 9.80E-05		
05/09/2024	-	05/16/2024	< 6.90E-04	< 9.91E-05		
05/16/2024	-	05/23/2024	< 6.90E-04	< 9.86E-05		
05/23/2024	-	05/30/2024	< 6.90E-04	< 9.83E-05		
			Period 5 Sum: < 2.76E-03			
	Period #:	6				
05/30/2024	-	06/06/2024	< 6.90E-04	< 9.90E-05		
06/06/2024	-	06/13/2024	< 6.90E-04	< 9.86E-05		
06/13/2024	-	06/20/2024	< 6.90E-04	< 9.93E-05		
06/20/2024	-	06/27/2024	< 6.90E-04	< 9.82E-05		
			Period 6 Sum: < 2.76E-03			
			2nd Quarter Total: 8.22E-03	^a HDER 9.93E-05		

^a HDER = Highest Daily Emission Rate