

LA-UR-20-28680

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Title: IDEA ID 856 – Los Alamos National Laboratory 2020 Third Quarter

Beryllium Emissions Report July 1-September 30, 2020, Air Quality

Permit No. 634-M2

Author(s): Carretti, Vincent Anthony

Intended for: Environmental Regulatory Document

 - NMED - Air quality - Reading Room - Air Quality

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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: 20-075

LAUR: 20-28680

Locates Action No: N/A

Date: 10/28/2020

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 2020 Third Quarter Beryllium Emissions Report July 1—September 30, 2020, Air Quality Permit No. 634-M2

Dear Mr. Feather:

Attached is a copy of the sampling data for the **third 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	
2020Q3	Highest daily emission rate	1.75 x 10 ⁻⁵ gm/24 hours	0.35 gm/24 hours	
2020Q3	Total amount for 2020Q3	8.54 x 10 ⁻⁴ gm	N/A	
2020Q3	Total amount for 2020	3.33 x 10 ⁻³ gm	3.5 gm/year	



In addition, on the Attachment 1 datasheet, you will note that between 07/08/2020 - 09/16/2020, stack samples remained in the sample collector for two weeks, instead of one week, due to changes in operation schedules due to COVID-19. Beginning on 09/16/2020, stack samples resumed the normal weekly schedule. 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,

Taunia Van Valkenburg

Group Leader

TVV/AMD/VAC:jdm

Attachment(s): Attachment 1 Beryllium 2020 Stack Emissions

Copy: Adrienne L. Nash, NA-LA, adrienne.nash@nnsa.doe.gov James P. Johnson, Triad, DDOPS, jpj@lanl.gov Michael W. Hazen, Triad, ALDESHQSS, mhazen@lanl.gov William R. Mairson, Triad, ALDESHQSS, wrmairson@lanl.gov Enrique Torres, Triad, EWP, etorres@lanl.gov Jennifer E. Payne, Triad, EPC-DO, jpayne@lanl.gov Paul A. Blumberg, Triad, STO-DO, blumberg@lanl.gov Matthew G. Martinez, Triad, PF-PROD, mgmartinez@lanl.gov Steven G. Gonzales, Triad, PF-MFG, sgg@lanl.gov Maxine M. McReynolds, Triad, GC-ESH, mcreynolds@lanl.gov Marc R. Gallegos, Triad, EPC-CP, marcg@lanl.gov Aaron M. Dailey, Triad, EPC-CP, adailey@lanl.gov Vincent A. Carretti, Triad, EPC-CP, vcarretti@lanl.gov Triad, EPC-CP Beryllium Permit #634-M2 Quarterly Report File aldeshqsscorrespondence@lanl.gov epccorrespondence@lanl.gov adesh-records@lanl.gov





K. ® Al Number:

P. Reporting Period:

July 1, 2020

856

L. Title V Permit Number:

To: September 30, 2020

P100-R2M4

New Mexico Environment Department Air Quality Bureau Compliance and Enforcement Section 525 Camino de los Marquez, Suite 1



O. NSR Permit Issue Date:

10/30/1998

Version 07.20.18	Santa Fe, Phone (50	OFMENT OFFIS			
NMED USE ONLY			NMED U	ISE ONLY	
TEMPO	REPORTING SU	BMITTAL FORM	Staff		
TEMPO	ALLE GILLLIA SO		Admin		
PLEASE NOTE: ® - Indicates required field					
SECTION I - GENERAL COM	PANY AND FACILITY INFO	RMATION			
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 K491	I	F 0 6 0 4	E.3 ® State: E	.4 ® Zip:	
B.2 ® City: Los Alamos	B.3 ® State: B.4 ® Zip: 8 7 5 4	E.2 ® City:		& Zip.	
C.1 ® Company Environmental Contact: Taunia S. Van Valkenburg	C.2 ® Title: Group Leader, EPC-CP	F.1 ® Facility Contact: Aaron M. Dailey	F.2 ® Title: Meteorology & Air Quality Team Leader		
C.3 ® Phone Number: (505) 665-9827	C.4 ® Fax Number: (505) 665-8858	F.3 ® Phone Number: (505) 667-7276	F.4 ® Fax Number: NA		
C.5 ® Email Address: tauniav@lanl.gov		F.5 ® Email Address: adailey@lanl.gov	320		
G. Responsible Official: (Title V only):	H. Title:	I. Phone Number: (505) 667-5015	J. Fax Number: NA		

M. Title V Permit Issue Date:

N. NSR Permit Number:

634-M2

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-andfaqs-for-compliance-and-enforcement/ for explanation SECTION II – TYPE OF SUBMITTAL (check one that applies) Title V Annual Compliance Permit Condition(s): Description: Certification Permit Condition(s): Description: Title V Semi-Annual в. 🗌 **Monitoring Report** Description: Regulation: Section(s): **NSPS Requirement** с. 🔲 (40CFR60) Description: Regulation: Section(s): MACT Requirement D. 🗌 (40CFR63) Section(s): Description: Regulation: **NMAC Requirement** E. 🔲 (20.2.xx) or NESHAP Requirement (40CFR61) Permit No. ⊠: or NOI No. □: Condition(s): Description: 2020Q3 Report containing beryllium emissions data from the Permit or Notice of Intent F. 🛛 continuous air monitor of the exhaust stack, due within 60 (NOI) Requirement 634-M2 days after calendar quarter. NOV No. □: or SFO No. □: Section(s): Description: Requirement of an or CD No. □: or Other □: G. 🗌 **Enforcement Action**

SECTION III - CERTIFIC	CATION			
After reasonable inquiry, I	Taunia S. Van Valkenburg (Name of Certifier)	certify that the information	in this submittal is tru	e, accurate and complete.
® Signature of Certifier:		® Title:	® Date	® Responsible Official for Title V?
Male	Silder Ja	Group Leader, EPC-CP	10/28/2020	☐ Yes ⊠ No

Reviewed By:	Date Reviewed:
Reviewed by.	Bate Reviewed.

ATTACHMENT 1 Beryllium 2020 Stack Emissions

ESHQSS: 20-075

LA-UR-20-28680

Los Alamos National Laboratory TA-03-0141 Beryllium 2020 Stack Emissions

TA-03-0141 StackID: 03014101

Sum of weekly results must be <3.5 g/year 12/19/2019	01/30/2020 Period 1 Sum:	Period #: 2	01/30/2020 - 02/06/2020 < 1.22E-04	02/06/2020 - 02/13/2020 < 1.22E-04	02/20/2020	02/27/2020	Period 2 Sum: < 4.88E-04		Ferion #: 3		- 03/05/2020 - 03/12/2020	93/05/2020 03/12/2020 03/19/2020
Sum of weekly results must be <3.5 g/year < 1.22E-04 < 1.22E-04 < 1.22E-04 < 1.22E-04	< 1.22E-04	riod 1 Sum: < 4.88E-04	riod 1 Sum: < 4.88E-04	riod 1 Sum: < 4.88E-04 < 1.22E-04	riod 1 Sum: < 4.88E-04 < 1.22E-04 < 1.22E-04	riod 1 Sum: < 4.88E-04 < 1.22E-04 < 1.22E-04 < 1.22E-04	riod 1 Sum: < 4.88E-04 < 1.22E-04 < 1.22E-04 < 1.22E-04 < 1.22E-04	riod 1 Sum: < 4.88E-04 < 1.22E-04 < 1.22E-04 < 1.22E-04 < 1.22E-04 riod 2 Sum: < 4.88E-04	riod 1 Sum: < 4.88E-04 < 1.22E-04 < 1.22E-04 < 1.22E-04 < 1.22E-04 < 1.22E-04 riod 2 Sum: < 4.88E-04	riod 1 Sum: < 4.88E-04 < 1.22E-04	riod 1 Sum: < 4.88E-04 < 1.22E-04 < 1.22E-04 < 1.22E-04 < 1.22E-04 riod 2 Sum: < 4.88E-04 < 1.22E-04 < 1.22E-04	riod 1 Sum: < 4.88E-04 < 1.22E-04 < 1.22E-04 < 1.22E-04 < 1.22E-04 riod 2 Sum: < 4.88E-04 < 1.22E-04 < 1.22E-04 < 1.22E-04 < 1.22E-04
Cannot Exceed 0.35 g/day < 5.84E-06 < 1.70E-05 < 1.74E-05	< 1.74E-05			< 1.76E-05	< 1.76E-05 < 1.75E-05	< 1.76E-05 < 1.75E-05 < 1.75E-05	< 1.76E-05 < 1.75E-05 < 1.75E-05 < 1.75E-05	< 1.76E-05 < 1.75E-05 < 1.75E-05 < 1.75E-05	< 1.76E-05 < 1.75E-05 < 1.75E-05 < 1.75E-05	< 1.76E-05 < 1.75E-05 < 1.75E-05 < 1.75E-05 < 1.75E-05	< 1.76E-05 < 1.75E-05 < 1.75E-05 < 1.75E-05 < 1.75E-05 < 1.75E-05	< 1.76E-05 < 1.75E-05 < 1.75E-05 < 1.75E-05 < 1.75E-05 < 1.75E-05 < 1.75E-05

1st Quarter Total: 1.46E-03

^aHDER 1.80E-05

^a HDER = Highest Daily Emission Rate

Los Alamos National Laboratory TA-03-0141 Beryllium 2020 Stack Emissions

TA-03-0141 StackID: 03014101

Period #: 06/10/2020 - 06/24/2020 -	04/29/2020 - 05/13/2020 - 05/27/2000 - 05/27/2000 - 05/27/2000 - 05/27/2000 - 05/27/2000 - 05/20	Period #: 03/31/2020 - 04/15/2020 -	Sampling dates
6 06/24/2020 07/08/2020	5 05/13/2020 05/27/2020 06/10/2020	4 04/15/2020 04/29/2020	g dates
< 1.22E-04 < 1.22E-04 Period 6 Sum: < 2.44E-04	< 1.43E-04 < 1.84E-04 < 1.97E-04 Period 5 Sum: < 5.24E-04	results must be <3.5 g/year <1.22E-04 <1.22E-04 Period 4 Sum: < 2.44E-04	Weekly(1) Sum of weekly
< 8.75E-06 < 8.71E-06	< 1.02E-05 < 1.32E-05 < 1.41E-05	g/day < 8.25E-06 < 8.74E-06	Emissions (g) Daily(2) Cannot Exceed 0.35

2nd Quarter Total: 1.01E-03

^aHDER 1.41E-05

^a HDER = Highest Daily Emission Rate

Los Alamos National Laboratory TA-03-0141 Beryllium 2020 Stack Emissions

TA-03-0141 StackID: 03014101

09/02/2020 09/16/2020 09/24/2020	08/06/2020 08/19/2020	9	07/08/2020 07/22/2020		
remou#:		Period #:	к э	Period #:	Sampling dates
09/16/2020 09/24/2020 10/01/2020	08/19/2020 09/02/2020	œ	07/22/2020 08/06/2020	7	dates
< 1.22E-04 < 1.22E-04 < 1.22E-04 Period 9 Sum: < 3.66E-04	< 1.22E-04 < 1.22E-04 Period 8 Sum: < 2.44E-04	Period 7 Sum: < 2.44E-04	< 1.22E-04 < 1.22E-04	Weekly(1) Sum of weekly results must be <3.5 g/year	
< 8.76E-06 < 1.52E-05 < 1.75E-05	< 9.51E-06 < 8.74E-06		< 8.71E-06 < 8.12E-06		Emissions (g)

3rd Quarter Total: 8.54E-04

*HDER 1.75E-05

^a HDER = Highest Daily Emission Rate