



Environmental Protection Division
Environmental Compliance Programs (ENV-CP)
 PO Box 1663, K490
 Los Alamos, New Mexico 87545
 (505) 667-0666

Date: **JAN 13 2016**
Symbol: ENV-DO-16-007
LA-UR: 16-20129
Locates Action No.: N/A

Manager, Compliance and Enforcement Section
 New Mexico Environment Department
 Air Quality Bureau
 525 Camino de los Marquez, Suite 1
 Santa Fe, NM 87505-1816

Dear Compliance & Enforcement Manager:

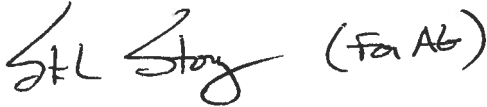
Subject: IDEA ID 856 – Los Alamos National Laboratory 2015 Fourth Quarter Beryllium Emissions Report October 1–December 31, 2015, Air Quality Permit No. 634-M2

Attached as Enclosure 1 you will find a copy of the sampling data obtained from the continuous air monitor installed on the main exhaust stack at the Beryllium Technology Facility (BTF) at Los Alamos National Laboratory (LANL) for the **fourth quarter of calendar year 2015**. This submission of the quarterly emissions data, collected from this source, is required by permit condition 5.f of NMED Air Quality Permit #634-M2 dated October 30, 1998. Furthermore, this quarterly report is transmitted within the allowed 60 days after the end of the calendar quarter, as specified in the permit.

Air Quality permit #634-M2 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. As can be seen on the attached data sheet, the highest daily emission rate (HDER) during the fourth quarter of calendar year 2015 was 7.45×10^{-5} grams per 24 hours, which is well below the daily permit limit. The total amount of beryllium emitted for the fourth quarter of calendar year 2015 was $<1.93 \times 10^{-3}$ grams. Additionally, the total for the all the four quarters of calendar year 2015 is $<6.92 \times 10^{-3}$ grams, which is well below the 3.5 gram per year limit specified in the permit. Based on the attached information, 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 Steven L. Story at (505) 665-2169 or Brinda Ramanathan at (505) 665-8879.

Sincerely,



Anthony R. Grieggs
Group Leader
Environmental Compliance Programs (ENV-CP)
Los Alamos National Security, LLC

ARG:SLS:BR/lm

Enclosure: Beryllium 2015 Stack Emissions

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**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 Fax (505) 476-4375**



Version 05.02.13

| 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: Los Alamos National Security, LLC | | | | | D. ® Facility Name: Los Alamos National Laboratory | | | | |
| B.1 ® Company Address: P.O Box 1663 MS K490 | | | | | 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: Anthony R. Grieggs | | | C.2 ® Title: Group Leader, ENV-CP | | F.1 ® Facility Contact: Steven L. Story | | | F.2 ® Title: Team Leader, Air Quality Permitting and Compliance Programs | |
| C.3 ® Phone Number: (505) 665-0451 | | | C.4 ® Fax Number: (505) 665-8858 | | F.3 ® Phone Number: (505) 665-2169 | | | F.4 ® Fax Number: (505) 665-8858 | |
| C.5 ® Email Address: grieggst@lanl.gov | | | | | F.5 ® Email Address: story@lanl.gov | | | | |
| G. Responsible Official: (Title V only): Michael T. Brandt | | | H. Title: Associate Director, ADESH | | I. Phone Number: (505) 667-4218 | | | J. Fax Number: (505) 665-3811 | |
| K. ® AI Number: 856 | | L. Title V Permit Number: P100-R2 | | M. Title V Permit Issue Date: 02/27/2015 | | N. NSR Permit Number: 634-M2 | | O. NSR Permit Issue Date: 10/30/1998 | |
| P. Reporting Period: From: October 1, 2015 To: December 31, 2015 | | | | | | | | | |

| SECTION II - TYPE OF SUBMITTAL (check one that applies) | | | | |
|---|---|--|-----------------------------|---|
| <input type="checkbox"/> | Title V Annual Compliance Certification | Permit Condition(s): | Description: | |
| <input type="checkbox"/> | Title V Semi-annual Monitoring Report | Permit Condition(s): | Description: | |
| <input type="checkbox"/> | NSPS Requirement (40CFR60) | Regulation: | Section(s): | Description: |
| <input type="checkbox"/> | MACT Requirement (40CFR63) | Regulation: | Section(s): | Description: |
| <input type="checkbox"/> | NMAC Requirement (20.2.xx) or NESHAP Requirement (40CFR61) | Regulation: | Section(s): | Description: |
| <input checked="" type="checkbox"/> | Permit or Notice of Intent (NOI) Requirement | Permit No. ®: or NOI No. □: 634-M2 | Condition(s): 5.f | Description: Report containing beryllium emissions data generated by the continuous air monitor of the exhaust stack, due within 60 days after each calendar quarter. |
| <input type="checkbox"/> | Requirement of an Enforcement Action | NOV No. □: or SFO No. □: or CD No. □: or Other □: | Section(s): | Description: |

| SECTION IV - CERTIFICATION | | | |
|---|---|---------------------------|---|
| After reasonable inquiry, I <u>Anthony R. Grieggs</u> certify that the information in this submittal is true, accurate and complete. <small>(name of reporting official)</small> | | | |
| ® Signature of Reporting Official: | ® Title: Group Leader, ENV-CP | ® Date: 1/13/16 | ® Responsible Official for Title V? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No |

Reviewed By: _____

Date Reviewed: _____

ENCLOSURE 1

Beryllium 2015 Stack Emissions

ENV-DO-16-007

LA-UR-16-20129

Date: JAN 13 2016

Beryllium 2015 Stack Emissions
TA-03-0141

TA-3-141 StackID: 3014101
Sampling dates

| Sampling dates | | | Emissions (g) | |
|--------------------|---|-----------|--|---|
| | | | Weekly(1) <i>Sum of weekly results must be <3.5 g/year</i> | Daily(2) <i>Cannot Exceed 0.35 g/day</i> |
| Period #: 1 | | | | |
| 12/24/2014 | - | 1/8/2015 | < 1.21E-04 | < 8.03E-06 |
| 1/8/2015 | - | 1/15/2015 | < 1.21E-04 | < 1.74E-05 |
| 1/15/2015 | - | 1/22/2015 | < 1.21E-04 | < 1.71E-05 |
| 1/22/2015 | - | 1/29/2015 | < 1.21E-04 | < 1.75E-05 |
| | | | Period 1 Sum: < 4.84E-04 | |
| Period #: 2 | | | | |
| 1/29/2015 | - | 2/5/2015 | < 1.21E-04 | < 1.74E-05 |
| 2/5/2015 | - | 2/12/2015 | < 1.21E-04 | < 1.73E-05 |
| 2/12/2015 | - | 2/19/2015 | < 1.21E-04 | < 1.72E-05 |
| 2/19/2015 | - | 2/26/2015 | < 1.21E-04 | < 1.76E-05 |
| | | | Period 2 Sum: < 4.84E-04 | |
| Period #: 3 | | | | |
| 2/26/2015 | - | 3/5/2015 | < 1.21E-04 | < 1.72E-05 |
| 3/5/2015 | - | 3/12/2015 | < 1.21E-04 | < 1.75E-05 |
| 3/12/2015 | - | 3/19/2015 | < 1.21E-04 | < 1.71E-05 |
| 3/19/2015 | - | 3/26/2015 | < 1.21E-04 | < 1.74E-05 |
| | | | Period 3 Sum: < 4.84E-04 | |
| | | | 1st Quarter Total: < 1.45E-03 | *HDER < 1.76E-05 |

* HDER = Highest Daily Emission Rate
 1/11/2016

Beryllium 2015 Stack Emissions
TA-03-0141

TA-3-141 StackID: 3014101

| Sampling dates | | Emissions (g) | |
|---|-------------|---|---------------------------------|
| | | Weekly(1) | Daily(2) |
| | | <i>Sum of weekly results must be <3.5 g/year</i> | <i>Cannot Exceed 0.35 g/day</i> |
| Period #: 4 | | | |
| 3/26/2015 | - 4/2/2015 | < 1.21E-04 | < 1.71E-05 |
| 4/2/2015 | - 4/9/2015 | < 1.21E-04 | < 1.73E-05 |
| 4/9/2015 | - 4/16/2015 | < 1.21E-04 | < 1.74E-05 |
| 4/16/2015 | - 4/23/2015 | < 1.21E-04 | < 1.75E-05 |
| 4/23/2015 | - 4/30/2015 | < 1.21E-04 | < 1.73E-05 |
| Period 4 Sum: < 6.05E-04 | | | |
| Period #: 5 | | | |
| 4/30/2015 | - 5/7/2015 | < 1.21E-04 | < 1.72E-05 |
| 5/7/2015 | - 5/14/2015 | < 1.21E-04 | < 1.74E-05 |
| 5/14/2015 | - 5/21/2015 | < 1.21E-04 | < 1.71E-05 |
| 5/21/2015 | - 5/28/2015 | < 1.21E-04 | < 1.75E-05 |
| 5/28/2015 | - 6/4/2015 | < 1.21E-04 | < 1.72E-05 |
| Period 5 Sum: < 6.05E-04 | | | |
| Period #: 6 | | | |
| 6/4/2015 | - 6/11/2015 | < 1.21E-04 | < 1.73E-05 |
| 6/11/2015 | - 6/18/2015 | < 1.21E-04 | < 1.74E-05 |
| 6/18/2015 | - 6/25/2015 | < 1.21E-04 | < 1.72E-05 |
| 6/25/2015 | - 7/2/2015 | < 1.21E-04 | < 1.73E-05 |
| Period 6 Sum: < 4.84E-04 | | | |
| 2nd Quarter Total: < 1.69E-03 | | *HDER < 1.75E-05 | |

*HDER = Highest Daily Emission Rate
1/11/2016

Beryllium 2015 Stack Emissions
TA-03-0141

TA-3-141 StackID: 3014101
Sampling dates

| Sampling dates | | Emissions (g) | |
|------------------------------------|-------------|---|---|
| | | Weekly(1) <i>Sum of weekly results must be < 3.5 g/year</i> | Daily(2) <i>Cannot Exceed 0.35 g/day</i> |
| Period #: 7 | | | |
| 7/2/2015 | - 7/9/2015 | < 1.21E-04 | < 1.72E-05 |
| 7/9/2015 | - 7/16/2015 | < 1.21E-04 | < 1.74E-05 |
| 7/16/2015 | - 7/23/2015 | < 1.21E-04 | < 1.73E-05 |
| 7/23/2015 | - 7/30/2015 | < 1.21E-04 | < 1.74E-05 |
| Period 7 Sum: < 4.84E-04 | | | |
| Period #: 8 | | | |
| 7/30/2015 | - 8/6/2015 | < 1.21E-04 | < 1.74E-05 |
| 8/6/2015 | - 8/13/2015 | < 1.21E-04 | < 1.72E-05 |
| 8/13/2015 | - 8/20/2015 | < 1.21E-04 | < 1.73E-05 |
| 8/20/2015 | - 8/27/2015 | 2.02E-04 | 2.91E-05 |
| 8/27/2015 | - 9/3/2015 | 3.16E-04 | 4.52E-05 |
| Period 8 Sum: < 8.81E-04 | | | |
| Period #: 9 | | | |
| 9/3/2015 | - 9/10/2015 | < 1.21E-04 | < 1.73E-05 |
| 9/10/2015 | - 9/17/2015 | < 1.21E-04 | < 1.72E-05 |
| 9/17/2015 | - 9/24/2015 | < 1.21E-04 | < 1.73E-05 |
| 9/24/2015 | - 10/1/2015 | < 1.21E-04 | < 1.74E-05 |
| Period 9 Sum: < 4.84E-04 | | | |

| | |
|---|-----------------------|
| 3rd Quarter Total: < 1.85E-03 | *HDER 4.52E-05 |
|---|-----------------------|

* HDER = Highest Daily Emission Rate
1/11/2016

Beryllium 2015 Stack Emissions
TA-03-0141

TA-3-141 StackID: 3014101

| Sampling dates | | Emissions (g) | |
|--|---|--|---|
| | | Weekly(1) <i>Sum of weekly results must be <3.5 g/year</i> | Daily(2) <i>Cannot Exceed 0.35 g/day</i> |
| Period #: 10 | | | |
| 10/1/2015 | - | 10/8/2015 | < 1.21E-04 |
| 10/8/2015 | - | 10/15/2015 | < 1.21E-04 |
| 10/15/2015 | - | 10/22/2015 | < 1.21E-04 |
| 10/22/2015 | - | 10/29/2015 | < 1.21E-04 |
| | | Period 10 Sum: < 4.84E-04 | |
| Period #: 11 | | | |
| 10/29/2015 | - | 11/5/2015 | < 1.21E-04 |
| 11/5/2015 | - | 11/12/2015 | < 1.22E-04 |
| 11/12/2015 | - | 11/19/2015 | < 1.22E-04 |
| 11/19/2015 | - | 11/25/2015 | < 1.22E-04 |
| 11/25/2015 | - | 12/3/2015 | 5.91E-04 |
| | | Period 11 Sum: < 1.08E-03 | |
| Period #: 12 | | | |
| 12/3/2015 | - | 12/10/2015 | < 1.22E-04 |
| 12/10/2015 | - | 12/17/2015 | < 1.22E-04 |
| 12/17/2015 | - | 12/24/2015 | < 1.22E-04 |
| | | Period 12 Sum: < 3.66E-04 | |
| 4th Quarter Total: < 1.93E-03 | | *HDER 7.45E-05 | |
| Sum of four quarters: < 6.92E-03 | | | |

* HDER = Highest Daily Emission Rate
1/11/2016