

LA-UR-21-28530

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Title: Request to Allow Like-Kind Replacement of a Failed Beryllium (Be) Machining Lathe for Los Alamos National Laboratory (LANL) Technical Area (TA) 35, Building 213 for NSR Permit ID - 632

Author(s): Carretti, Vincent Anthony

Intended for: Environmental Regulatory Document

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**Environmental Protection and Compliance Division
Compliance Programs Group**

Symbol: EPC-DO-21-266
LAUR: 21-28530
Date: SEP 01 2021

Mr. James Nellessen, Ph.D.
Environmental Scientist
Major Source Permit Specialist
New Mexico Environment Department, Air Quality Bureau
525 Camino de los Marquez, Suite 1
Santa Fe, NM 87505-1816

**Subject: Request to Allow Like-Kind Replacement of a Failed Beryllium (Be)
Machining Lathe for Los Alamos National Laboratory (LANL) Technical
Area (TA) 35, Building 213 for NSR Permit ID - 632**

Dear Mr. Nellessen:

As we have discussed by phone, the beryllium machining lathe for TA-35, Building 213 has failed. This is the lathe for Permit No. 632 issued December 26, 1985. With this letter, we are requesting that LANL be allowed to install a like-kind replacement unit that is a different model number but has identical process specifications as the existing equipment.

As described in the amended Table 2-A for this replacement, the equipment is virtually the same machine. The new lathe has a new axis to move the spindle up and down and that is why the new one is a Model 650 as opposed to the failed Model 350. The new model will not increase capacity. The two beryllium machines have specific parameters of depth of cut and the rpm of the spindle that stays the same with the new machine. As a result, machining will be at the same rate.

In summary, there are no variances in the specifications of these units and process throughput and emissions will not be increased as a result. We will continue to meet all conditions of Permit 632 and Section A700 of our Title V Operating Permit, P100-R2M4. An Administrative Permit Revision form 2-1 and updated Table 2-A for the change in equipment is attached. As noted in Table 2-A, we intend to use the same HEPA filter exhaust system as previously used for the failed unit.

It should be noted that it is our intent to submit a permit application to add a lathe and a new Be sputter coating process to the TA-35 Building 213 operations. The application for this upgrade is being processed at this time and is intended to be submitted to NMED within a few months. This may involve the refurbishment of the currently failed unit for future use once the permit is fully approved, but it is more likely that a new unit will need to be procured.

If you have any questions or comments regarding this revised information or would like to discuss the information in greater detail, please contact Steve Pierett at (540) 250-1656.

Sincerely,



Taunia J. Sandquist
Group Leader

Attachment(s): Attachment 1 Administrative Permit Revision Section 2-I
Attachment 2 Revised Table 2-A

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ATTACHMENT 1

Administrative Permit Revision Section 2-I

EPC-DO-21-266

LA-UR-21-28530

Date: SEP 01 2021

Permitting Administrative Multi-Form

Use for NSR administrative permit revisions (including GCPs), TV administrative amendments, TV responsible official notifications, and other submittals required by a permit condition. Refer to Section 4 for instructions, acronyms, and mailing addresses.

For Department use only:		For Department use only:
Reviewed by:		Received Date
Permit revision number:		
Date:		
<input type="checkbox"/> Approved <input type="checkbox"/> Completed <input type="checkbox"/> Denied		

Section 1: General Information – Required for All Submittals

1	Facility Name: Los Alamos National Laboratory		
2	Preparer/Consultant Name: Steve Pierett	Title: Environmental Professional – Air Quality	
3	Email: spierett@lanl.gov	Phone: (540) 250-1656	
4	Address: P.O. Box 1663, MS J978, Los Alamos, NM 87545		
5	Air Permit Contact: Marjorie B. Stockton	Title: Meteorology & Air Quality Team Leader	
6	Email: mstockton@lanl.gov	Phone: (505) 665-3289	
7	Address: P.O. Box 1663, MS J978, Los Alamos, NM 87545		
8	Check all boxes below for which this submittal applies:	AI #: 856	Permit #: 632
	<input checked="" type="checkbox"/> NSR Construction Permit (20.2.72 NMAC) <input checked="" type="checkbox"/> TV Operating Permit (20.2.70 NMAC)	<input type="checkbox"/> NOI (20.2.73 NMAC) (Sections 2-B, 2-D) <input type="checkbox"/> Notice of Exemption (20.2.72.202.B NMAC) (Section 2-F)	<input type="checkbox"/> PSD Permit (20.2.74 NMAC) <input type="checkbox"/> Nonattainment Permit (20.2.79 NMAC)

Section 2: Details of Submittal

Only print and submit the pages necessary for your submittal. Print double sided head-to-toe, flip on short end (tablet). The Permit Section responds to all TV Administrative amendments and responds only to denials of NSR administrative revisions. Courier proof of delivery is required if you want confirmation that the Department received this submittal. Check the box(es) applicable to this submittal:

- | | |
|--|---|
| <input type="checkbox"/> 2-A(i) & 2-A(ii): Identical Engine or Turbine Replacements
<input type="checkbox"/> 2-B: Owner, Operator, and Name Changes to NOIs or Construction Permits
<input type="checkbox"/> 2-C: Ownership or Operational Control Changes for Title V Permits
<input type="checkbox"/> 2-D: Closing a Facility or Removing Units from a Permit or Canceling an NOI | <input type="checkbox"/> 2-E: Correct Typographical Error
<input type="checkbox"/> 2-F: Reporting Exempt Equipment for Minor Construction Permits or for No Permit Required (NPR) Facilities
<input type="checkbox"/> 2-G: Add Minor NSR Exempt Equipment to Construction Permits for PSD or Nonattainment Sources
<input type="checkbox"/> 2-H: Title V Responsible Official Designations |
|--|---|

Section 2-I: Submittals to the Permit Programs Manager

As Required by Permit Conditions or Other Regulations

(Notification or Administrative Revision)

Use this section for submittals to the Permit Programs Manager of notifications or administrative permit revisions/amendments required by permit conditions that do not correspond with any other section of this submittal form. Explain your request, including any permit condition or regulatory citations that requires this submittal, and include the necessary attachments.

For example:

- Your permit has a condition that allows a specific change through an administrative revision.
- Your permit has a condition that requires submittal of information to the attention of the Permit Programs Manager such as a good combustion practice plan.
- A condition that allows a deadline to be extended through an administrative permit revision.
- Notification per General Condition B116 Short Term Engine Replacement
- Notification of TV Operating Permit Section 502(b)(10) Changes (20.2.70.302.H(1) NMAC).
 - Before submitting a 502(b)(10) change request, contact the Major Source Program Manager or the TV Program Manager to discuss what information should be included in the request to ensure that the request is federally enforceable if enforceable limits are needed to avoid a construction permit application. Visit www.env.nm.gov/air-quality/permitting-section-home-page/ for contact information.
 - If the change must be made immediately, you may send the request by email to the appropriate manager listed on the web page.

The beryllium machining lathe for TA-35, Building 213 has failed. This is the lathe for Permit No. 632 issued December 26, 1985. With this letter we are requesting that LANL be allowed to install a like-kind replacement unit that is a different model number but has identical process specifications as the existing equipment described as follows:

As described in the amended Table 2-A for this replacement, the equipment is virtually the same machine. The new lathe has a new axis to move the spindle up and down and that is why the new one is a Model 650 as opposed to the failed Model 350. The new model will not increase capacity. The two beryllium machines have specific parameters of depth of cut and the rpm of the spindle that stays the same with the new machine so that machining will be at the same rate.

In summary, there are no variances in the specifications of these units and process throughput and emissions will not be increased as a result. We will continue to meet all conditions of Permit 632 and Section A700 of our Title V Operating Permit, P100-R2M4. A cover letter and updated Table 2-A for the change in equipment is attached. As noted in Table 2-A, we intend to use the same HEPA filter exhaust system as previously used for the failed unit.

Section 3: Certification – Required for All Submittals

Company Name: Triad National Security, LLC

I, Taunia J. Sandquist, hereby certify that the information and data submitted in this application are true and as accurate as possible, to the best of my knowledge and professional expertise and experience.

Signed this 31 day of August, 2021, upon my oath or affirmation, before a notary of the State of New Mexico.

Taunia J. Sandquist
Signature¹

8/31/21
Date

Taunia J. Sandquist
Printed Name

Group Leader
Title

Scribed and sworn before me on this 31st day of August, 2021.

My authorization as a notary of the State of New Mexico expires on the 12th day of June, 2023.

Barbara J. Bushong
Notary's Signature

August 31, 2021
Date

Barbara J. Bushong
Notary's Printed Name

¹ For Title V applications, the signature must be of the Responsible Official as defined in 20.2.70.7.AE NMAC.



ATTACHMENT 2

Revised Table 2-A

EPC-DO-21-266

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Date: SEP 01 2021

Table 2-A: Regulated Emission Sources

Unit and stack numbering must correspond throughout the application package. If applying for a NOI under 20.2.73 NMAC, equipment exemptions under 2.72.202 NMAC do not apply.

Unit Number ¹	Source Description	Make	Model #	Serial #	Manufacturer's Rated Capacity ³ (Specify Units)	Requested Permitted Capacity ³ (Specify Units)	Date of Manufacture ²	Controlled by Unit #	Source Classification Code (SCC)	For Each Piece of Equipment, Check One	RICE Ignition Type (CI, SI, 4SLB, 4SRB, 2SLB) ⁴	Replacing Unit No.
							Date of Construction/ Reconstruction ²	Emissions vented to Stack #				
TA-35-213-1	Beryllium Machining	Moore Nanotech	350UPL	N/A	N/A	N/A	1985	HEPA-1		<input type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Modified <input checked="" type="checkbox"/> To be Replaced		
							1985	S9				
TA-35-213-2	Beryllium Machining	Moore Nanotechnology Systems	650FG V2	N/A	N/A	N/A	Mar-21	HEPA-1		<input type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input checked="" type="checkbox"/> New/Additional <input checked="" type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Replaced		
							TBD	S9				
										<input type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Replaced		
										<input type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Replaced		
										<input type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Replaced		
										<input type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Replaced		
										<input type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Replaced		
										<input type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Replaced		
										<input type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Replaced		
										<input type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Replaced		
										<input type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Replaced		
										<input type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Replaced		
										<input type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Replaced		
										<input type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Replaced		

¹ Unit numbers must correspond to unit numbers in the previous permit unless a complete cross reference table of all units in both permits is provided.

² Specify dates required to determine regulatory applicability.