Data Base Summary (Statement of Basis) – proposed for hearing – 1-5-2023

NSR Permit

Type of Permit Action: Regular-Significant Revision

PSD or Not	**Minor or Title V**	**Portable or Not**
Synthetic Minor (not PSD)	**Major-Title V**	**Stationary**

Facility:	Los Alamos National Laboratory
Company:	U.S. Department of Energy National Nuclear Security Administration
Facility Type:	FED-Dept of Energy
Permit No. (NSR)	632-M1
Operating Permit No. (TV)	P100-R2M1 and P100-R3 in process (hearing TBD)
Agency Interest No.	856 - PRN20210004
AIRS ID No.	350280001
SIC CODE:	9711: National security
Permit Writer:	James E. Nellessen
Application Notarized Date:	December 6, 2021
Receive Date:	December 23, 2021
Timeliness of TV Application:	N/A
Ruled Incomplete:	N/A
Ruled Complete:	January 21, 2022
APP. sent to Field Office:	January 21, 2022
Public involvement Plan (PIP):	February 9, 2022 (signed)
PSD APP. Sent to EPA:	N/A
Public Notice Date & Newspaper:	January 27, 2022
Comments Due:	February 26, 2022
Analysis Review Begins:	TBD
Analysis Review Ends:	TBD
Public Hearing:	currently scheduled for January 17, 2023
Proposed Permit to EPA Acknowledged:	N/A
Permit Due:	April 21, 2022
Permit Issued:	TBD
PSD Permit to EPA:	N/A
Facility Location:	This facility is located in and adjacent to the town of Los Alamos in Los Alamos County, New Mexico.
UTM Zone:	13; **Datum:** NAD83
UTM Easting:	380,790 meters East
UTM Northing:	3,970,800 meters North
Elevation:	6437 ft
County:	Los Alamos
Streamlined permits:	LANL is not located in an area where streamlined permits are restricted, and this permit is not a streamlined permit.

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NSR Agency* Notification:

Agency	Distance	Units	Date Email Sent
Class I - Bandelier National Monument	2.3	km	January 27, 2022
Class I - San Pedro Parks Wilderness	43.4	km	January 27, 2022
State - Pueblo of Santa Ana	40	km	January 27, 2022
State - Pueblo of Zia	49.2	km	January 27, 2022

*As required by 20.2.72.206.A.(7): Mail a copy of the public notice at the same time it is sent for publication to the appropriate agency in the following locations if the source will locate within 50 kilometers (31.1 miles) of the boundary of other states, Bernalillo County, or a Class I Area.

Part II – Facility Specifications

Table 102.A: Total Pollutant Emissions from Entire Facility: Note: The emissions below apply to the entire LANL facility and not to the Target Fabrication Facility. Table included for information only.

Pollutant	Emissions (tons per year)	Emission Type	Change in Emissions since TV Permit P100-R2M1
Nitrogen Dioxide	245	Allowable	0
Carbon Monoxide	225	Allowable	0
Volatile Organic Compounds (VOC)	200	Allowable	0
Particulate Matter (total suspended)	120	Allowable	0
Particulate Matter (10 microns or less)	120	Allowable	0
Particulate Matter (2.5 microns or less)	120	Allowable	0
Sulfur Dioxide	150	Allowable	0
Greenhouse Gas (GHG) (CO2e)	>75,000	Potential	0

Note: Total Potential Pollutant Emissions in Table 102.A, may include fugitive emissions; routine or predictable, startup, shutdown, and maintenance emissions (SSM); and permitted malfunction allowances if these are a sources of regulated air pollutants from this facility.

Table 102.B: Total Potential Hazardous Air Pollutants (HAPs) and State Toxic Air Pollutants (TAPs) Note: The emissions below (except for beryllium) apply to the entire LANL facility and not to the Target Fabrication Facility. Table included for information only.

Pollutant	Emissions (tons per year)	Emission Type	Change in Emissions since TV Permit P100-R2M1
[1,2]Individual HAP	8	Allowable	0
[3]Beryllium (Target Fabrication Facility, TA-35-213)	0.36 gm/yr	Allowable	0
[2]Total HAP	24	Allowable	0

1. HAP emissions are already included in the VOC emission total.
2. The individual and total HAPs emissions as listed are facility-wide emission caps for the entire LANL facility, and do not apply to the Target Fabrication Facility (meaning only the 0.36 gm/yr beryllium applies to the Target Fabrication Facility).
3. Annual beryllium limit for the Target Fabrication Facility (TA-35-213) covered by this NSR permit in grams per year.

Unit # (Subject Item ID)	SI Description	Initial	Primary	Control Equipment Mfg & model (or equivalent)
TA-35-213-1 (ACT 2)	Beryllium Activity-Target Fabrication Facility - Machining TA-35-213-1	Pre-Filter (48%)	Particulate Air Filter (HEPA) (99.95%)	TA-35-213-1 (ACT 2)
TA-35-213-2-3 (ACT 43)	Beryllium Activity-Target Fabrication Facility - Machining TA-35-213-2-3	Pre-Filter (48%)	Particulate Air Filter (HEPA) (99.95%)	TA-35-213-2-3 (ACT 43)
TA-35-213-4 (ACT 44)	Beryllium Activity-Target Fabrication Facility - Be Coating TA-35-213-4	Pre-Filter (48%)	Particulate Air Filter (HEPA) (99.95%)	TA-35-213-4 (ACT 44)

Equipment Specifications (Active/Alternative):

Unit No.	Unit Type	Make	Model No.	Serial No.	Yr of Construction	Yr of Manufacture	Operating Rate Max/Site	Operating Capacity Max/Site	Subject Item Status	Subject Item Description
TA-35-213-1 ACT 2	Beryllium Work	Moore Nanotech Be Machining TA-35-213-1	350UPL	N/A	2004 (like-kind replacement)	2004 (like-kind replacement)	0.060 gm/hr Be removal rate	0.060 gm/hr Be removal rate	Active	Beryllium Activity-Target Fabrication Facility - Machining TA-35-213-1
TA-35-213-2-3 ACT 43	Beryllium Work	Be Machining TA-35-213-2-3	TBD	TBD	TBD	TBD	0.060 gm/hr Be removal rate	0.060 gm/hr Be removal rate	Active	Beryllium Activity-Target Fabrication Facility - Machining TA-35-213-2-3

Equipment Specifications (Active/Alternative):

Unit No.	Unit Type	Make	Model No.	Serial No.	Yr of Construction	Yr of Manufacture	Operating Rate Max/Site	Operating Capacity Max/Site	Subject Item Status	Subject Item Description
TA-35-213-4 ACT 44	Beryllium Work	Be Coating TA-35-213-4	TBD	N/A	TBD	TBD	0.060 gm/hr Be removal rate	0.060 gm/hr Be removal rate	Active	Beryllium Activity-Target Fabrication Facility - Be Coating TA-35-213-4

Equipment Specifications (Inactive/Retired/Removed):

Unit No.	Unit Type	Make	Model No.	Serial No.	Yr of Construction	Yr of Manufacture	Operating Rate Max/Site	Operating Capacity Max/Site	Subject Item Status	Subject Item Description
TA-35-213-1 ACT 2	Beryllium Work	Moore Nanotech Be Machining TA-35-213-1	350UPL	N/A	26-DEC-85 (initial)	01-JAN-85 (initial)	0.060 gm/hr Be removal rate	0.060 gm/hr Be removal rate	Removed	Beryllium Activity-Target Fabrication Facility - Machining TA-35-213-1

Emissions: Pollutant **Permitted** (Allowable) Emissions per piece of equipment or Subject Item as represented by applicant.

Unit No.	[1]Be (gm/yr)	Be (gm/24-hr)	Be (gm/hr)	[1]PM (gm/yr)	PM (gm/24-hr)	PM (gm/hr)
TA-35-213-1-2-3-4 (ACT2, 43, 44)	0.36	0.0015	0.0000625	0.36	0.0015	0.0000625

1 Be = beryllium; gm = grams; yr = year; 24-hr = 24 hour day. PM = particulate matter and since Be is a metal it is treated as particulate matter, controlled via HEPA particulate matter filters, and hence the limits as presented in the permit are treated as Be particulate matter (Be = PM). Be is a HAP (hazardous air pollutant).

Maximum Beryllium allowed under Federal NESHAP 40 CFR 61, Subpart C, Beryllium NESHAP (40 CFR 60.32 Emission Standard)

Unit No.	Be (gm/24-hr)	Be (lb/24-hr)	Be (gm/yr)	Be (lb/yr)
40 CFR 61.32 Emission Standard	10	0.022	3650	8.0