EMID-701866
Rec'd 1/25/22

Los Alamos
NATIONAL LABORATORY

Environment, Safety, Health, Quality, Safeguards, and Security, (ESHQSS)
P.O. Box 1663, K491
Los Alamos, NM 87545
505-667-4218

National Nuclear Security Administration
Los Alamos Field Office
3747 West Jemez Road, A316
Los Alamos, NM 87544
505-665-7314/Fax 505-667-5948

Symbol: ESHQSS: 22-001
LA-UR: 22-20044
Locates Action No.: N/A
Date: JAN 25 2022

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: Los Alamos National Laboratory Title V Annual Compliance Certification (AI 856) for Permit P100-R2M4 for January 1 – December 31, 2021

Dear Mr. Feather:

Enclosed is Los Alamos National Laboratory's (LANL) Annual Compliance Certification Report (ACC) for Operating Permit P100-R2M4 for January 1 – December 31, 2021.

This report is required by permit condition A109.C of Title V Operating Permit P100-R2M4, and is being submitted by January 30, 2022, as required by this condition. Additionally, this Annual Compliance Certification Report Form, is certified by LANL's "Responsible Official" as defined in 20.2.70 NMAC, and a copy is being provided to the U.S. EPA Region 6.

If you have any questions or comments regarding this submittal or would like to discuss the submittal in greater detail, please contact Adrienne Nash at (505) 665-5026 or Margie Stockton at (505) 665-3289.

Sincerely,

JENNIFER PAYNE (Affiliate) Digitally signed by JENNIFER PAYNE (Affiliate) Date: 2022.01.13 09:52:57 -07'00'

Jennifer E. Payne
Division Leader
Environmental Protection and Compliance
Triad National Security, LLC
Los Alamos National Security

Sincerely,

Theodore A. Wyka
Manager, Los Alamos Field Office
National Nuclear Security Administration
U.S. Department of Energy
Los Alamos Field Office

Attachment(s): Attachment 1 Los Alamos National Laboratory Title V Annual Compliance Certification (AI 856) for Permit P100-R2M4 for January 1 – December 31, 2021

Copy: Erica Le Doux, USEPA/Region 6, LeDoux.Erica@Epa.gov
Theodore A. Wyka, NA-LA, theodore.wyka@nnsa.doe.gov
Erika Baeza-Wisdom, NA-LA, erika.baeza-wisdom@nnsa.doe.gov
Darlene S. Rodriguez, NA-LA, darlene.rodriguez@nnsa.doe.gov
Adrienne L. Nash, NA-LA, adrienne.nash@nnsa.doe.gov
Silas DeRoma, NA-LA, silas.deroma@nnsa.doe.gov
Stephen Jochem, NA-LA, stephen.jochem@nnsa.doe.gov
Michael Mikolanis, EM-LA, michael.mikolanis@em.doe.gov
M. Lee Bishop, EM-LA, lee.bishop@em.doe.gov
David Nickless, EM-LA, david.nickless@em.doe.gov
Hai Shen, EM-LA, hai.shen@em.doe.gov
John H. Evans, EM-LA, john.h.evans@em.doe.gov
Kelly J. Beierschmitt, Triad, DDOPS, beierschmitt@lanl.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
Jeanette T. Hyatt, Triad, EWP, jhyatt@lanl.gov
Maxine M. McReynolds, Triad, GC-ESH, mcreynolds@lanl.gov
Kristin Honig, Triad, EPC-DO, khonig@lanl.gov
Steven L. Story, Triad, EPC-CP, story@lanl.gov
Marjorie B. Stockton, Triad, EPC-CP, mstockton@lanl.gov
Katelyn R. Mahoney, Triad, EPC-CP, kmahoney@lanl.gov
Taylor A. Valdez, Triad, PCM-DO, tvaldez@lanl.gov
Erik Lochell, N3B, erik.lochell@em-la.doe.gov
Kim LeBak, N3B kim.lebak@em-la.doe.gov
Joseph Murdock, N3B, Joseph.Murdock@em-la.doe.gov
Christian Maupin, N3B, christian.maupin@em-la.doe.gov
Dana Lindsay, N3B, dana.lindsay@em-la.doe.gov
Triad, EPC-CP Title V Permit File
Triad, EPC-CP Title V Annual Compliance Certification File
Triad, EPC-CP Correspondence File
lasomailbox@nnsa.doe.gov
aldeshqsscorrespondence@lanl.gov
epccorrespondence@lanl.gov
eshqss-dcrm@lanl.gov
gc-esh@lanl.gov
interface@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

Version 07.20.18

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: Department of Energy, National Nuclear Security Administration			**D. ® Facility Name:** Los Alamos National Laboratory		
B.1 ® Company Address: 3747 West Jemez Road			**E.1 ® Facility Address:** P.O. Box 1663 MS J978		
B.2 ® City: Los Alamos	**B.3 ® State:** NM	**B.4 ® Zip:** 87544	**E.2 ® City:** Los Alamos	**E.3 ® State:** NM	**E.4 ® Zip:** 87545
C.1 ® Company Environmental Contact: Adrienne L. Nash	**C.2 ® Title:** Program Manager		**F.1 ® Facility Contact:** Marjorie B. Stockton	**F.2 ® Title:** Meteorology & Air Quality Team Leader	
C.3 ® Phone Number: (505) 665-5026	**C.4 ® Fax Number:** (505) 667-9998		**F.3 ® Phone Number:** (505) 665-3289	**F.4 ® Fax Number:** NA	
C.5 ® Email Address: adrienne.nash@nnsa.doe.gov			**F.5 ® Email Address:** mstockton@lanl.gov		
G. Responsible Official: (Title V only): Theodore A. Wyka	**H. Title:** Manager		**I. Phone Number:** (505) 667-5105	**J. Fax Number:** NA	

K. ® AI Number:	L. Title V Permit Number:	M. Title V Permit Issue Date:	N. NSR Permit Number:	O. NSR Permit Issue Date:
856	P100-R2M4	July 18, 2019	2195	Various

P. Reporting Period: From: January 1, 2021 To: December 31, 2021

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-and-faqs-for-compliance-and-enforcement/ for explanation.

SECTION II – TYPE OF SUBMITTAL (check one that applies)

A. ☒	Title V Annual Compliance Certification	Permit Condition(s): All	Description: LANL Title V Annual Compliance Certification for January 1 - December 31, 2021	
B. ☐	Title V Semi-Annual Monitoring Report	Permit Condition(s):	Description:	
C. ☐	NSPS Requirement (40CFR60)	Regulation:	Section(s):	Description:
D. ☐	MACT Requirement (40CFR63)	Regulation:	Section(s):	Description:
E. ☐	NMAC Requirement (20.2.xx) or NESHAP Requirement (40CFR61)	Regulation:	Section(s):	Description:
F. ☐	Permit or Notice of Intent (NOI) Requirement	Permit No.☐: or NOI No.☐:	Condition(s):	Description:
G. ☐	Requirement of an Enforcement Action	NOV No. ☐: or SFO No. ☐: or CD No. ☐: or Other ☐:	Section(s):	Description:

SECTION III - CERTIFICATION

After reasonable inquiry, I Theodore A. Wyka (Name of Certifier) certify that the information in this submittal is true, accurate and complete.

® Signature of Certifier:	® Title:	® Date	® Responsible Official for Title V?
	Manager	01/24/2022	☒ Yes ☐ No

Reviewed By: _____ Date Reviewed: _____

Title V Report Certification Form

I. Report Type

☒ **Annual Compliance Certification**

☐ **Semi-Annual Monitoring Report**

☐ **Other Specify:**

II. Identifying Information

Facility Name: Los Alamos National Laboratory		
Facility Address: P.O. Box 1663, MS J978	State: NM	Zip: 87545
Responsible Official (RO): Theodore A. Wyka	Phone: 505-667-5105	Fax: NA
RO Title: Manager	RO e-mail: theodore.wyka@nnsa.doe.gov	
Permit No.: P100-R2M4	Date Permit Issued: 7/18/2019	
Report Due Date (as required by the permit): 1/30/2022	Permit AI number: 856	
Time period covered by this Report: From: 1/1/2021	To: 12/31/2021	

III. Certification of Truth, Accuracy, and Completeness

I am the Responsible Official indicated above. I, (Theodore A. Wyka) certify that I meet the requirements of 20.2.70.7.AE NMAC and that I have been identified to the Department as such through a permitting action or notification. I certify that, based on information and belief formed after reasonable inquiry, the statements and information contained in the attached Title V report are true, accurate, and complete.

Signature  Date: 01/24/2022

Attachment 1

Los Alamos National Laboratory Title V Annual Compliance Certification (AI 856) for Permit P100-R2M4 for January 1 – December 31, 2021

ESHQSS: 22-001

LA-UR-22-20044

Date: JAN 25 2022

Annual Compliance Certification - Permit Requirements Certification Table

Annual Compliance Certification Data for Title V Permit No. P100-R2M4

Was this facility *continuously* in compliance with *all conditions* of this *permit* during the reporting period? (Did you check either "Yes" or "N/A" for *every condition* in response to question 3?)	☒ **Yes** ☐ **No**
1. Provide *Method(s) or other information or other facts used to determine the compliance status* in the "Methods:" row beneath each permit condition. 2. If you answered *No* to question 3, list *all* deviations in the *Deviations* section. For *all* Deviations that *produced* excess emissions, provide *only* **a)** the AQBCR EER Tracking Number. For *all* Deviations that *did not produce* excess emissions, provide **a)** The Unit ID, **b)** The Cause of and a Description of the Deviation, **c)** the Corrective Action, and **d)** the Start & End Dates of the deviation. Please indicate in **b)**, your *Description*, whether each deviation has been previously reported to NMED.	3. Was this facility *continuously* in compliance with *all* requirements of this condition during the reporting period?

FACILITY SPECIFIC REQUIREMENTS

A100 Introduction and TV Minor Permit Modification to Permit P100-R2M1

A. All terms, conditions, and applicable requirements of Title V Air Quality Permit No. P100-R2M1, including Part A Facility Specific Requirements, and General Conditions Parts B and C, remain in effect unless specifically modified or revised by this TV minor permit modification.

☒ **Yes** ☐ **No** ☐ **N/A**

Methods: This Annual Compliance Certification report is certifying operation conducted under P100-R2M4 from January 1-December 31, 2021 for all sources.

Deviations: Unit ID	Cause, Description of Deviation, and Corrective Action Taken or Tracking number	Start Date	End Date

A101 Permit Duration (expiration)

A. The term of this permit is five (5) years. It will expire five years from the date of issuance. Application for renewal of this permit is due twelve (12) months prior to the date of expiration. (20.2.70.300.B.2 and 302.B NMAC)

☒ **Yes** ☐ **No** ☐ **N/A**

Methods: Operating permit P100-R2 was issued on February 27, 2015, and is valid until February 27, 2020. The renewal application was submitted on February 26, 2019 which was 12 months prior to the expiration date.

Deviations: Unit ID	Cause, Description of Deviation, and Corrective Action Taken or Tracking number	Start Date	End Date

A101 Permit Duration (expiration)

B. If a renewal permit is not issued prior to the expiration date, the permittee may continue to operate beyond the expiration date, provided that a timely renewal application is submitted no later than twelve (12) months prior to the expiration date. (20.2.70.400.D NMAC)

☒ **Yes** ☐ **No** ☐ **N/A**

Methods: Operating permit P100-R2 was issued on February 27, 2015, and is valid until February 27, 2020. The application was submitted on February 26, 2019 which was 12 months prior to the expiration date. The renewal permit has not yet been issued, but LANL continues to operate beyond the expiration date as stipulated by A101B.

Deviations: Unit ID	Cause, Description of Deviation, and Corrective Action Taken or Tracking number	Start Date	End Date

A102 Facility: Description

1. Provide *Method(s) or other information or other facts used to determine the compliance status* in the "Methods:" row beneath each permit condition. 2. If you answered *No* to question 3, list *all* deviations in the *Deviations* section. For *all* Deviations that *produced* excess emissions, provide *only* **a)** the AQBCR EER Tracking Number. For *all* Deviations that *did not produce* excess emissions, provide **a)** The Unit ID, **b)** The Cause of and a Description of the Deviation, **c)** the Corrective Action, and **d)** the Start & End Dates of the deviation. Please indicate in **b)**, your *Description*, whether each deviation has been previously reported to NMED.				3. Was this facility *continuously* in compliance with *all* requirements of this condition during the reporting period?
B. This Laboratory is located at UTM Zone 13, UTMH 380.790 km, UTMV 3970.800 km, in and adjacent to Los Alamos, New Mexico in Los Alamos County.				☒ **Yes** ☐ **No** ☐ **N/A**
Methods: The facility description and location provided in this permit condition are correct.				
Deviations: Unit ID	Cause, Description of Deviation, and Corrective Action Taken or Tracking number	Start Date	End Date	
A103 Facility: Applicable Regulations **A.** The permittee shall comply with all applicable sections of the requirements listed in Table 103.A				☒ **Yes** ☐ **No** ☐ **N/A**
Methods: See specific sections under each source category for compliance with applicable requirements.				
Deviations: Unit ID	Cause, Description of Deviation, and Corrective Action Taken or Tracking number	Start Date	End Date	
A103 Facility: Applicable Regulations **C.** Compliance with the terms and conditions of this permit regarding source emissions and operation that were included in NSR permits 632, 634, 1081, 2195B, 2195F, 2195H, 2195N, and 2195P demonstrate compliance with national ambient air quality standards specified at 40 CFR 50, which were applicable at the time air dispersion modeling was performed for those NSR Permits.				☒ **Yes** ☐ **No** ☐ **N/A**
Methods: See each source category for compliance with NSR permits 632, 634, 1081, 2195B, 2195F, 2195H, 2195N, and 2195P and applicable regulations specified at 40 CFR 50.				
Deviations: Unit ID	Cause, Description of Deviation, and Corrective Action Taken or Tracking number	Start Date	End Date	
A104 Facility: Regulated Sources **A.** Source category specific Regulated Equipment Tables are included in sections A600 through A1400 under the Equipment Specific Requirements part of this permit. The Regulated Equipment Tables list all of the process equipment authorized for this facility. Emission units that were identified as insignificant or trivial activities (as defined in 20.2.70.7 NMAC) and equipment not regulated pursuant to the Act are not included.				☒ **Yes** ☐ **No** ☐ **N/A**
Methods: See each source category for specific regulated equipment.				
Deviations: Unit ID	Cause, Description of Deviation, and Corrective Action Taken or Tracking number	Start Date	End Date	
A105 Facility: Control Equipment **A.** Source category specific Control Equipment Tables are included in sections A601 through A1401 under the Equipment Specific Requirements part of this permit. The Control Equipment Tables list all the pollution control equipment required for this facility. Each emission point is identified by the same number that was assigned to it in the permit application				☒ **Yes** ☐ **No** ☐ **N/A**

1. Provide *Method(s) or other information or other facts used to determine the compliance status* in the "Methods:" row beneath each permit condition. 2. If you answered *No* to question 3, list *all* deviations in the *Deviations* section. For *all* Deviations that *produced* excess emissions, provide *only* **a)** the AQBCR EER Tracking Number. For *all* Deviations that *did not produce* excess emissions, provide **a)** The Unit ID, **b)** The Cause of and a Description of the Deviation, **c)** the Corrective Action, and **d)** the Start & End Dates of the deviation. Please indicate in **b)**, your *Description*, whether each deviation has been previously reported to NMED.	3. Was this facility *continuously* in compliance with *all* requirements of this condition during the reporting period?

Methods: See each source category for specific regulated control equipment.

Deviations: Unit ID	Cause, Description of Deviation, and Corrective Action Taken or Tracking number	Start Date	End Date

A106 Facility: Allowable Emissions

A. Source category specific Allowable Emissions are established in sections A602 through A1402 under the Equipment Specific Requirements part of this permit. Table 106.A below shows a summary of these emission limits, which are subject to permit fees.

(40 CFR 50; Paragraphs 1, 7, and 8 of 20.2.70.302.A NMAC and NSR Permit Nos. 632, 634-M2, 1081-M1, 1081-M1-R1, 1081-M1-R3, 1081-M1-R5, 1081-M1-R6, 2195B-M2, 2195F-R4, GCP-3-2195G, 2195H, 2195N-R2, and 2195P-R2).

☒ **Yes** ☐ **No** ☐ **N/A**

Methods: Source-specific and facility-wide emissions are calculated on a six-month basis and compared to the limits listed in the referenced table. No emission limits were exceeded during this certification period.

Deviations: Unit ID	Cause, Description of Deviation, and Corrective Action Taken or Tracking number	Start Date	End Date

A106 Facility: Allowable Emissions

B. Facility-wide emissions for criteria pollutants, VOC, and HAPs from all emission units, combined, shall not exceed the limits in Table 106.B.

☒ **Yes** ☐ **No** ☐ **N/A**

Methods: Source-specific and facility-wide emissions are calculated on a six-month basis and compared to the limits listed in the referenced table. No emission limits were exceeded during this certification period. Actual emissions are included in the emission inventory reports submitted to the New Mexico Environment Department (NMED) Air Quality Bureau (AQB).

Deviations: Unit ID	Cause, Description of Deviation, and Corrective Action Taken or Tracking number	Start Date	End Date

A106 Facility: Allowable Emissions

C. The permittee shall maintain records of the Facility-Wide annual emissions totals for each pollutant listed in Table 106.B. The record shall include estimated actual emissions from all sources on a semiannual and calendar year basis.

☒ **Yes** ☐ **No** ☐ **N/A**

Methods: Records of facility-wide annual emissions totals for each pollutant in Table 106.B, including estimated actual emissions from all sources are maintained on a semiannual and calendar year basis. Records are kept on-site.

Deviations: Unit ID	Cause, Description of Deviation, and Corrective Action Taken or Tracking number	Start Date	End Date

A107 Facility: Allowable Startup, Shutdown, & Maintenance (SSM) and Malfunction Emissions

A. Separate allowable startup, shutdown, and maintenance (SSM) emission limits are not required for this facility since the SSM emissions are predicted to be less than the limits established in Table 106.A. The permittee shall maintain records in accordance with Condition B109.E.

☒ **Yes** ☐ **No** ☐ **N/A**

1. Provide *Method(s) or other information or other facts used to determine the compliance status* in the "Methods:" row beneath each permit condition. 2. If you answered *No* to question 3, list *all* deviations in the *Deviations* section. For *all* Deviations that *produced* excess emissions, provide *only* **a)** the AQBCR EER Tracking Number. For *all* Deviations that *did not produce* excess emissions, provide **a)** The Unit ID, **b)** The Cause of and a Description of the Deviation, **c)** the Corrective Action, and **d)** the Start & End Dates of the deviation. Please indicate in **b)**, your *Description*, whether each deviation has been previously reported to NMED.	3. Was this facility *continuously* in compliance with *all* requirements of this condition during the reporting period?

Methods: Emissions from SSM are not expected to be significantly different from normal operating emissions. Excess emissions did not occur during this certification period.

Deviations: Unit ID	Cause, Description of Deviation, and Corrective Action Taken or Tracking number	Start Date	End Date

A108 Facility: Hours of Operation

A. The operating hours for this facility are established under each source category in sections A604 through A1404 under the Equipment Specific Requirements part of this permit. As applicable, monitoring, recordkeeping, and reporting provisions are specified to demonstrate compliance with allowable hours of operation that are also established under each source category in sections A604 through A1404.

☒ **Yes** ☐ **No** ☐ **N/A**

Methods: Compliance with the hours of operation for each source is covered under each source category. A tracking mechanism is in place for each source with an operating hour limit. Operating hour limits were not exceeded during this certification period.

Deviations: Unit ID	Cause, Description of Deviation, and Corrective Action Taken or Tracking number	Start Date	End Date

A109 Facility: Reporting Schedules

A. A Semi-Annual Report of monitoring activities is due within 45 days following the end of every 6-month reporting period. The six month reporting periods start on January 1st and July 1st of each year.

Methods: The Semi-Annual Monitoring Reports were submitted within the allowed 45 days following the end of every six-month reporting period. During calendar year 2021, two monitoring reports were submitted. The Semi-Annual Monitoring Report for July 1–December 31, 2020, was submitted on February 10, 2021 (SBR20210002). The Semi-Annual Monitoring Report for January 1–June 30, 2021 was submitted on August 10, 2021 (SBR20210004).

☒ **Yes** ☐ **No** ☐ **N/A**

Deviations: Unit ID	Cause, Description of Deviation, and Corrective Action Taken or Tracking number	Start Date	End Date

A109 Facility: Reporting Schedules

B. A Semi-Annual Report of actual emissions from all permitted sources unless otherwise specified in this permit is due within 90 days following the end of every 6-month reporting period as defined at Condition A109.A. Emission estimates of pollutants NOx, CO, SO2, VOC, TSP, PM10, and PM2.5 shall not include fugitive emissions. Emission estimates of HAPs shall include fugitive emissions. Emission estimates shall not include Insignificant or Trivial Activities, except that facility-wide emissions from all natural gas combustion sources shall be estimated. The reports shall include a comparison of actual emissions that occurred during the reporting period with the facility-wide allowable emission limits at Table 106.B.

☒ **Yes** ☐ **No** ☐ **N/A**

1. Provide *Method(s) or other information or other facts used to determine the compliance status* in the "Methods:" row beneath each permit condition. 2. If you answered *No* to question 3, list *all* deviations in the *Deviations* section. For *all* Deviations that *produced* excess emissions, provide *only* **a)** the AQBCR EER Tracking Number. For *all* Deviations that *did not produce* excess emissions, provide **a)** The Unit ID, **b)** The Cause of and a Description of the Deviation, **c)** the Corrective Action, and **d)** the Start & End Dates of the deviation. Please indicate in **b)**, your *Description*, whether each deviation has been previously reported to NMED.	3. Was this facility *continuously* in compliance with *all* requirements of this condition during the reporting period?

Methods: The Semi-Annual Emissions Reports were submitted within the allowed 90 days following the end of every six-month reporting period as defined at Condition A109.A. During calendar year 2021, two emissions reports were submitted. The Semi-Annual Emissions Report for July 1 - December 31, 2020, was submitted on March 29, 2021 (SBR20210003). The Semi-Annual Emissions Report for January 1 - June 30, 2021, was submitted on September 22, 2021 (SBR20210005).

Deviations: Unit ID	Cause, Description of Deviation, and Corrective Action Taken or Tracking number	Start Date	End Date

A109 Facility: Reporting Schedules

C. The Annual Compliance Certification Report is due within 30 days of the end of every 12-month reporting period. The 12-month reporting period starts on January 1st of each year.

☒ **Yes** ☐ **No** ☐ **N/A**

Methods: The 2020 Annual Compliance Certification report for permit P100-R2M4, was submitted to NMED AQB on January 28, 2021 (SBR20210001), within 30 days of the end of the 12-month reporting period ending on December 31, 2020 and submitted to the EPA on January 28, 2021.

Deviations: Unit ID	Cause, Description of Deviation, and Corrective Action Taken or Tracking number	Start Date	End Date

A109 Facility: Reporting Schedules

D. The permittee shall post start-up notifications required by 20.2.72.212(B) NMAC and 40 CFR Parts 60, 61 or 63, to the permittee's Electronic Public Reading Room at http://eprr.lanl.gov/oppie/service.

☒ **Yes** ☐ **No** ☐ **N/A**

Methods: No new permitted source subject to these requirements was started up during this certification period. Therefore, a start-up notification was not required.

Deviations: Unit ID	Cause, Description of Deviation, and Corrective Action Taken or Tracking number	Start Date	End Date

A110 Facility: Fuel Sulfur Requirements

A. Sulfur requirements are defined by source category, as applicable, in sections A605 through A1405 under the Equipment Specific Requirements part of this permit.

☒ **Yes** ☐ **No** ☐ **N/A**

Methods: See each source category for applicable sulfur requirements.

Deviations: Unit ID	Cause, Description of Deviation, and Corrective Action Taken or Tracking number	Start Date	End Date

A111 Facility: 20.2.61 NMAC Opacity

A. Opacity requirements are defined by source category, as applicable, in sections A606 through A1406 under the Equipment Specific Requirements part of this permit.

1. Provide *Method(s) or other information or other facts used to determine the compliance status* in the "Methods:" row beneath each permit condition. 2. If you answered *No* to question 3, list *all* deviations in the *Deviations* section. For *all* Deviations that *produced* excess emissions, provide *only* **a)** the AQBCR EER Tracking Number. For *all* Deviations that *did not produce* excess emissions, provide **a)** The Unit ID, **b)** The Cause of and a Description of the Deviation, **c)** the Corrective Action, and **d)** the Start & End Dates of the deviation. Please indicate in **b)**, your *Description*, whether each deviation has been previously reported to NMED.				3. Was this facility *continuously* in compliance with *all* requirements of this condition during the reporting period?
Methods: See each source category for applicable opacity requirements.				☒ **Yes** ☐ **No** ☐ **N/A**
Deviations: Unit ID	Cause, Description of Deviation, and Corrective Action Taken or Tracking number	Start Date	End Date	
A115 Radionuclide NESHAP **A.** The permittee shall comply with the requirements of 40 CFR 61, Subpart H – NESHAP for Radionuclides other than Radon from DOE Facilities.				
Methods: The EPA limit for radionuclide emissions, corresponding to a maximum off-site dose, is 10 millirem per year. The projected emissions from all LANL sources for this certification period are below the 10 millirem off-site limit. The annual report summarizing 2020 radionuclide emissions was submitted to EPA on June 29, 2021 and is available to NMED upon request.				☒ **Yes** ☐ **No** ☐ **N/A**
Deviations: Unit ID	Cause, Description of Deviation, and Corrective Action Taken or Tracking number	Start Date	End Date	
A115 Radionuclide NESHAP **B.** The permittee shall comply with the requirements of 40 CFR 61, Subpart Q – NESHAP for Radon Emissions from DOE Facilities.				
Methods: LANL performed evaluations on the sources applicable under 40 CFR 61, Subpart Q and has determined that radon emission levels are below applicable thresholds. It was also determined that there would be no significant increase of Radon-222 in the future. This information was provided to EPA, which in turn provided LANL with a memorandum of understanding in agreement with LANL's findings.				☒ **Yes** ☐ **No** ☐ **N/A**
Deviations: Unit ID	Cause, Description of Deviation, and Corrective Action Taken or Tracking number	Start Date	End Date	
A116 Asbestos NESHAP **A.** The permittee shall comply with the requirements of 40 CFR 61, Subpart M- NESHAP for Asbestos.				
Methods: LANL is in compliance with the requirements of 40 CFR 61, Subpart M for this compliance certification period.				☒ **Yes** ☐ **No** ☐ **N/A**
Deviations: Unit ID	Cause, Description of Deviation, and Corrective Action Taken or Tracking number	Start Date	End Date	
A117 Stratospheric Ozone **A.** The permittee shall comply with the standards for servicing of motor vehicle air conditioners pursuant to 40 CFR 82, Subpart				
Methods: Motor vehicle air conditioners (MVAC) are serviced, pursuant to 40 CFR part 82, Subpart B by certified LANL refrigeration technicians. These certified technicians comply with EPA standards for servicing motor vehicle air conditioners.				☒ **Yes** ☐ **No** ☐ **N/A**
Deviations: Unit ID	Cause, Description of Deviation, and Corrective Action Taken or Tracking number	Start Date	End Date	
A117 Stratospheric Ozone **B.** The permittee shall comply with the standards for servicing and maintaining and disposing equipment containing refrigerants pursuant to 40 CFR,				

1. Provide *Method(s) or other information or other facts used to determine the compliance status* in the "Methods:" row beneath each permit condition. 2. If you answered *No* to question 3, list *all* deviations in the *Deviations* section. For *all* Deviations that *produced* excess emissions, provide *only* **a)** the AQBCR EER Tracking Number. For *all* Deviations that *did not produce* excess emissions, provide **a)** The Unit ID, **b)** The Cause of and a Description of the Deviation, **c)** the Corrective Action, and **d)** the Start & End Dates of the deviation. Please indicate in **b)**, your *Description*, whether each deviation has been previously reported to NMED.	3. Was this facility *continuously* in compliance with *all* requirements of this condition during the reporting period?
Subpart F. **Methods:** A Stratospheric Ozone Protection Program is in place at LANL. LANL, through our internal maintenance group, as well as other outside contractors, uses only certified technicians and certified recycling and recovery equipment. LANL's refrigeration technicians, as well as other outside contractors, are trained and follow LANL procedures to ensure that required service practices in 40 CFR 82, Subpart F are followed.	☒ **Yes** ☐ **No** ☐ **N/A**

Deviations: Unit ID	Cause, Description of Deviation, and Corrective Action Taken or Tracking number	Start Date	End Date

A117 Stratospheric Ozone **C.** The permittee shall comply with the standards for servicing and maintaining equipment that contains halons pursuant to 40 CFR 82, Subpart H. **Methods:** Certified LANL refrigeration technicians maintain the halon systems. These technicians comply with the standards for servicing and maintaining equipment containing halons pursuant to 40 CFR Part 82, Subpart H.

☒ **Yes** ☐ **No**
☐ **N/A**

Deviations: Unit ID	Cause, Description of Deviation, and Corrective Action Taken or Tracking number	Start Date	End Date

A117 Stratospheric Ozone **D.** The permittee shall comply with the standards on the ban on refrigeration and air-conditioning appliances containing HCFCs pursuant to 40 CFR 82, Subpart I. **Methods:** LANL has a process in place to ensure that the standards on the ban of refrigeration and air-conditioning appliances containing HCFCs pursuant to 40 CFR 82, Subpart I are met.

☒ **Yes** ☐ **No**
☐ **N/A**

Deviations: Unit ID	Cause, Description of Deviation, and Corrective Action Taken or Tracking number	Start Date	End Date

EQUIPMENT SPECIFIC REQUIREMENTS **ASPHALT PRODUCTION** **A600 Regulated Sources – Asphalt Production** **A.** Table 600.A lists all of the process equipment authorized for this source category. Emission units that were identified as insignificant or trivial activities (as defined in 20.2.70.7 NMAC) and equipment not regulated pursuant to the Act are not included. **Methods:** No new equipment was added, but the listed equipment in this source category was disassembled during this certification period (excluding those identified as insignificant, trivial and not regulated pursuant to the Act). GCP-3-2195G-R1 for Asphalt Equipment Substitution was approved by NMED-AQB on December 2, 2021. New asphalt equipment will be replacing the old plant in 2022.

☒ **Yes** ☐ **No**
☐ **N/A**

Deviations: Unit ID	Cause, Description of Deviation, and Corrective Action Taken or Tracking number	Start Date	End Date

A601 Control Equipment – Asphalt Production

1. Provide *Method(s) or other information or other facts used to determine the compliance status* in the "Methods:" row beneath each permit condition. 2. If you answered *No* to question 3, list *all* deviations in the *Deviations* section. For *all* Deviations that *produced* excess emissions, provide *only* **a)** the AQBCR EER Tracking Number. For *all* Deviations that *did not produce* excess emissions, provide **a)** The Unit ID, **b)** The Cause of and a Description of the Deviation, **c)** the Corrective Action, and **d)** the Start & End Dates of the deviation. Please indicate in **b)**, your *Description*, whether each deviation has been previously reported to NMED.				3. Was this facility *continuously* in compliance with *all* requirements of this condition during the reporting period?
A. Table 601.A lists all of the pollution control equipment required for the applicable regulated equipment in this source category. Each emission point is identified by the same number that was assigned to it in the permit application.				☒ **Yes** ☐ **No** ☐ **N/A**
Methods: No new pollution control equipment was added, but the listed equipment was dissasembled during this certification period.				
Deviations: Unit ID	Cause, Description of Deviation, and Corrective Action Taken or Tracking number	Start Date	End Date	
A602 Emission Limits – Asphalt Production **A.** Table 602.A lists the emission units, and their allowable emission limits. (40 CFR 50; Paragraphs 1, 7, and 8 of 20.2.70.302.A NMAC; 20.2.11 NMAC; 40 CFR 60, Subpart I; NSR Permit GCP-3-2195G)				
Methods: The asphalt plant was disassembled and did not operate during 2021. LANL asphalt plant operations meet the requirements of 20.2.11 NMAC; 40 CFR Part 60, Subpart I; and NSR Permit No. GCP-3-2195G. Emissions are calculated and reported on a six-month basis in accordance with permit condition A109.B. Comparison against the allowable emission limits is performed at each of these reporting periods. Allowable emission limits were not exceeded during this certification period.				☒ **Yes** ☐ **No** ☐ **N/A**
Deviations: Unit ID	Cause, Description of Deviation, and Corrective Action Taken or Tracking number	Start Date	End Date	
A603 Applicable Requirements – Asphalt Production **A.** The permittee shall comply with all applicable sections of the requirements listed in Table 603.A.				
Methods: The asphalt plant was disassembled and did not operate during 2021. LANL asphalt plant operations comply with the applicable requirements listed in Table 603.A.				☒ **Yes** ☐ **No** ☐ **N/A**
Deviations: Unit ID	Cause, Description of Deviation, and Corrective Action Taken or Tracking number	Start Date	End Date	
A604 Operational Limitations – Asphalt Production **A.** The permittee shall meet the requirements of NSR permit no. GCP-3-2195G, including the requirements in this permit.				
Methods: The asphalt plant was disassembled and did not operate during 2021. The asphalt plant operates in accordance with the requirements in operating permits P100-R2M1, P100-R2M2, P100-R2M3, and P100-R2M4 and the conditions specified in NSR permit no. GCP-3-2195G.				☒ **Yes** ☐ **No** ☐ **N/A**
Deviations: Unit ID	Cause, Description of Deviation, and Corrective Action Taken or Tracking number	Start Date	End Date	
A604 Operational Limitations – Asphalt Production **A.** The equipment in this source category is authorized to operate during those daylight hours occurring between one-half hour after sunrise and through one-half hour before sunset each day of the year. Annual hours of operation are limited to 4380 hrs/y. This limitation on operating hours				

1. Provide *Method(s) or other information or other facts used to determine the compliance status* in the "Methods:" row beneath each permit condition. 2. If you answered *No* to question 3, list *all* deviations in the *Deviations* section. For *all* Deviations that *produced* excess emissions, provide *only* **a)** the AQBCR EER Tracking Number. For *all* Deviations that *did not produce* excess emissions, provide **a)** The Unit ID, **b)** The Cause of and a Description of the Deviation, **c)** the Corrective Action, and **d)** the Start & End Dates of the deviation. Please indicate in **b)**, your *Description*, whether each deviation has been previously reported to NMED.	3. Was this facility *continuously* in compliance with *all* requirements of this condition during the reporting period?
does not apply to the use of the hot oil heater or the loading and/or hauling of asphalt products or materials. Monitoring, recordkeeping, and reporting for operational hours shall be conducted according to NSR Permit GCP-3-2195G.	
Methods: (Correction Needed in Template: This permit condition should be A604.B, not A604.A) The asphalt plant was disassembled and did not operate during 2021. The asphalt plant operates within the allowed daylight hours. To aid operators, a current sunrise/sunset chart is maintained at the plant. A log of start up and shut down times and operating hours is kept as required by the operating permit and GCP-3-2195G permit. The asphalt plant did not operate in 2021, so therefore did not exceed 4,380 hours of operation annually during this certification period.	☒ **Yes** ☐ **No** ☐ **N/A**

Deviations: Unit ID	Cause, Description of Deviation, and Corrective Action Taken or Tracking number	Start Date	End Date

A605 Fuel Requirements – Asphalt Production **A. Asphalt Plant Combustion Sources** **Requirement**: Combustion sources located at the asphalt plant shall combust only those fuels allowed under condition III.A.3 of the NSR Permit GCP-3-2195G. **Monitoring**: N/A **Recordkeeping**: The permittee shall meet the recordkeeping requirements of GCP-3 and maintain records in accordance with Section B109. **Reporting**: The permittee shall submit reports described in Section A109 and in accordance with Section B110.	☒ **Yes** ☐ **No** ☐ **N/A**

1. Provide *Method(s) or other information or other facts used to determine the compliance status* in the "Methods:" row beneath each permit condition. 2. If you answered *No* to question 3, list *all* deviations in the *Deviations* section. For *all* Deviations that *produced* excess emissions, provide *only* **a)** the AQBCR EER Tracking Number. For *all* Deviations that *did not produce* excess emissions, provide **a)** The Unit ID, **b)** The Cause of and a Description of the Deviation, **c)** the Corrective Action, and **d)** the Start & End Dates of the deviation. Please indicate in **b)**, your *Description*, whether each deviation has been previously reported to NMED.	3. Was this facility *continuously* in compliance with *all* requirements of this condition during the reporting period?

Methods: The asphalt plant was disassembled and did not operate during 2021.

Requirement: Pipeline quality natural gas is used at the asphalt plant and is allowed under condition III.A.3 of the NSR permit GCP-3-2195G.

Monitoring: N/A

Recordkeeping: Records are maintained in accordance with Section B109.

Reporting: A109.A: The Semi-Annual Monitoring Reports were submitted within the allowed 45 days following the end of every six-month reporting period. During calendar year 2021, two monitoring reports were submitted. The Semi-Annual Monitoring Report for July 1–December 31, 2020, was submitted on February 10, 2021 (SBR20210002). The Semi-Annual Monitoring Report for January 1–June 30, 2021 was submitted on August 10, 2021 (SBR20210004).

A109.B: The Semi-Annual Emissions Reports were submitted within the allowed 90 days following the end of every six-month reporting period as defined at Condition A109.A. During calendar year 2021, two emissions reports were submitted. The Semi-Annual Emissions Report for July 1 - December 31, 2020, was submitted on March 29, 2021 (SBR20210003). The Semi-Annual Emissions Report for January 1 - June 30, 2021, was submitted on September 22, 2021 (SBR20210005).

A109.C: The 2020 Annual Compliance Certification report for permit P100-R2M4, was submitted to NMED AQB on January 28, 2021 (SBR20210001), within 30 days of the end of the 12-month reporting period ending on December 31, 2020 and submitted to the EPA on January 28, 2021.

All reporting requirements are completed and submitted in accordance with Section B110.

Deviations: Unit ID	Cause, Description of Deviation, and Corrective Action Taken or Tracking number	Start Date	End Date

A607 Asphalt Production – Other

A. Asphalt Plant Baghouse – Differential Pressure

Requirement: The baghouse shall be equipped with a device to continually measure the pressure drop across the baghouse.

Monitoring: The permittee shall monitor the differential pressure (inches of water) across the filters by the use of a differential pressure gauge. Pressure gauge readings and the time period the rotary dryer drum operates shall be recorded by a datalogger each time the rotary dryer drum is operating. The pressure data shall confirm whether the filter(s) are operating within the unit's specifications.

☒ **Yes** ☐ **No**

☐ **N/A**

Recordkeeping: The permittee shall manually record the baghouse pressure drop readings at least once each day the rotary drum dryer operates and maintain records of all baghouse differential pressure readings in accordance with Section B109.

Reporting: The permittee shall submit reports described in Section A109 and in accordance with Section B110.

1. Provide *Method(s) or other information or other facts used to determine the compliance status* in the "Methods:" row beneath each permit condition. 2. If you answered *No* to question 3, list *all* deviations in the *Deviations* section. For *all* Deviations that *produced* excess emissions, provide *only* **a)** the AQBCR EER Tracking Number. For *all* Deviations that *did not produce* excess emissions, provide **a)** The Unit ID, **b)** The Cause of and a Description of the Deviation, **c)** the Corrective Action, and **d)** the Start & End Dates of the deviation. Please indicate in **b)**, your *Description*, whether each deviation has been previously reported to NMED.	3. Was this facility *continuously* in compliance with *all* requirements of this condition during the reporting period?

Methods: The asphalt plant was disassembled and did not operate during 2021.

Requirement: The baghouse is equipped with a magnehelic gauge connected to a data-logger to continually monitor the differential pressure across the baghouse.

Monitoring: The differential pressure data is used to confirm proper operation of the baghouse. The differential pressure is measured during rotary dryer drum operation as described below:

1) A datalogger records differential pressure readings every two minutes and transmits the pressure drop data through a leased phoneline to a remote terminal unit.

2) A chart recorder records differential pressure readings and serves as a backup when there is a problem with the remote data-transmission phone communication.

3) The asphalt plant operator manually records the differential pressure readings at each start-up and shut-down daily.

Recordkeeping: Recordkeeping conditions are met using a datalogger, backup chart recorder, and operator's differential pressure entries at the start and end of each operation daily. Records are maintained in accordance with Section B109.

Reporting: Emissions and monitoring reports are submitted on a six-month basis and compliance certification is submitted on an annual basis in accordance with permit conditions A109 and B110. For more information, see comments in Section A605 of this report.

Deviations: Unit ID	Cause, Description of Deviation, and Corrective Action Taken or Tracking number	Start Date	End Date

A607 Asphalt Production – Other

B. Asphalt Plant Baghouse - Stack Height (Unit TA-60-BDM)

Requirement: The rotary dryer/baghouse exhaust stack shall be no less than 10 meters in height.

Monitoring: N/A

Recordkeeping: The permittee shall maintain records in accordance with Section B109.

Reporting: The permittee shall submit reports described in Section A109 and in accordance with Section B110.

☒ **Yes** ☐ **No**

☐ **N/A**

1. Provide *Method(s) or other information or other facts used to determine the compliance status* in the "Methods:" row beneath each permit condition. 2. If you answered *No* to question 3, list *all* deviations in the *Deviations* section. For *all* Deviations that *produced* excess emissions, provide *only* **a)** the AQBCR EER Tracking Number. For *all* Deviations that *did not produce* excess emissions, provide **a)** The Unit ID, **b)** The Cause of and a Description of the Deviation, **c)** the Corrective Action, and **d)** the Start & End Dates of the deviation. Please indicate in **b)**, your *Description*, whether each deviation has been previously reported to NMED.	3. Was this facility *continuously* in compliance with *all* requirements of this condition during the reporting period?

Methods: The asphalt plant was disassembled and did not operate during 2021.

Requirement: The height of the asphalt plant stack has been measured and is no less than 10 meters. The stack is a permanent structure attached to the baghouse fan outlet and its height does not change.

Monitoring: N/A

Recordkeeping: Records are maintained in accordance with Section B109.

Reporting: Emissions and monitoring reports are submitted on a six-month basis and compliance certification is submitted on an annual basis in accordance with permit conditions A109 and B110. For more information, see comments in Section A605 of this report.

Deviations: Unit ID	Cause, Description of Deviation, and Corrective Action Taken or Tracking number	Start Date	End Date

A607 Asphalt Production – Other

C. Asphalt Plant Baghouse – Opacity

Requirement: Visible emissions from the rotary dryer/baghouse exhaust stack shall not exhibit an opacity of 20% or greater averaged over a (6) minute period.

Monitoring: During periods of drum dryer operation, the permittee shall perform six (6) minute opacity readings on the rotary dryer/baghouse stack. Opacity readings shall be performed at least once per month during any month the drum dryer operates. The observations shall be conducted according to 40 CFR 60, Appendix A, Method 9.

Recordkeeping: The permittee shall maintain records of all opacity observations and in accordance with Section B109.

Reporting: The permittee shall submit reports described in Section A109 and in accordance with Section B110.

Methods: The asphalt plant was disassembled and did not operate during 2021.

☒ **Yes** ☐ **No**

☐ **N/A**

Requirement: LANL has certified visible emissions (opacity) readers on-site who perform readings in accordance with 40 CFR Part 60, Appendix A, Reference Method 9 to determine compliance with the opacity limit. No opacity readings were taken and visible emissions exhibited an opacity of 20% or greater during this certification period.

Monitoring: LANL has certified visible emissions (opacity) readers on-site who perform monthly six (6) minute opacity readings using the procedures in 40 CFR Part 60, Appendix A, Reference Method 9 to determine compliance with the opacity limitation. No visible emissions exhibited an opacity of 20% or greater during this certification period.

Recordkeeping: Records are maintained in accordance with Section B109.

Reporting: Emissions and monitoring reports are submitted on a six-month basis and compliance certification is submitted on an annual basis in accordance with permit conditions A109 and B110. For more information, see comments in Section A605 of this report.

Deviations: Unit ID	Cause, Description of Deviation, and Corrective Action Taken or Tracking number	Start Date	End Date

1. Provide *Method(s) or other information or other facts used to determine the compliance status* in the "Methods:" row beneath each permit condition. 2. If you answered *No* to question 3, list *all* deviations in the *Deviations* section. For *all* Deviations that *produced* excess emissions, provide *only* **a)** the AQBCR EER Tracking Number. For *all* Deviations that *did not produce* excess emissions, provide **a)** The Unit ID, **b)** The Cause of and a Description of the Deviation, **c)** the Corrective Action, and **d)** the Start & End Dates of the deviation. Please indicate in **b)**, your *Description*, whether each deviation has been previously reported to NMED.	3. Was this facility *continuously* in compliance with *all* requirements of this condition during the reporting period?
A607 Asphalt Production – Other **D. Asphalt Plant Baghouse – Fines Cleanout** **Requirement**: The permittee shall sequester or remove particulates collected by the control equipment to prevent wind-blown particulate emissions. Recycled baghouse fines shall be recycled into the drum mixer via a closed-loop system. **Monitoring**: N/A **Recordkeeping**: The permittee shall maintain records in accordance with Section B109. **Reporting**: The permittee shall submit reports described in Section A109 and in accordance with Section B110.	☒ **Yes** ☐ **No** ☐ **N/A**
Methods: The asphalt plant was disassembled and did not operate during 2021. Requirement: Baghouse fines (particulates) are removed from the baghouse and cyclone by a screw conveyor. The removed fines are recycled into the asphalt production process via a closed loop system. Visible emissions from this system were not observed during this certification period. Monitoring: N/A Recordkeeping: Records are maintained in accordance with Section B109. Reporting: Emissions and monitoring reports are submitted on a six-month basis and compliance certification is submitted on an annual basis in accordance with permit conditions A109 and B110. For more information, see comments in Section A605 of this report.	

Deviations: Unit ID	Cause, Description of Deviation, and Corrective Action Taken or Tracking number	Start Date	End Date

A607 Asphalt Production – Other **E. Asphalt Plant Production Rate (Unit TA-60-BDM)** **Requirement**: To avoid Compliance Assurance Monitoring (CAM) requirements under 40 CFR 64, the asphalt plant shall limit uncontrolled potential PM emissions by limiting asphalt production to less than or equal to 6,000 tons per year. **Monitoring**: The permittee shall monitor the total daily production rate. **Recordkeeping**: The permittee shall calculate a weekly rolling, 12-month total production rate and maintain records in accordance with Section B109. **Reporting**: The permittee shall submit reports described in Section A109 and in accordance with Section B110.	☒ **Yes** ☐ **No** ☐ **N/A**

1. Provide *Method(s) or other information or other facts used to determine the compliance status* in the "Methods:" row beneath each permit condition. 2. If you answered *No* to question 3, list *all* deviations in the *Deviations* section. For *all* Deviations that *produced* excess emissions, provide *only* **a)** the AQBCR EER Tracking Number. For *all* Deviations that *did not produce* excess emissions, provide **a)** The Unit ID, **b)** The Cause of and a Description of the Deviation, **c)** the Corrective Action, and **d)** the Start & End Dates of the deviation. Please indicate in **b)**, your *Description*, whether each deviation has been previously reported to NMED.	3. Was this facility *continuously* in compliance with *all* requirements of this condition during the reporting period?

Methods: The asphalt plant was disassembled and did not operate during 2021.

Requirement: The asphalt plant production rate did not exceed 6,000 tons per year.

Monitoring: Asphalt production is monitored and recorded on a daily basis. The weekly rolling 12-month total is calculated and compared to the production limit set in this permit condition. Asphalt production amount is recorded daily in an operation log. The asphalt production rate for this certification period did not exceed 6,000 tons per year.

Recordkeeping: Records are maintained in accordance with Section B109.

Reporting: Emissions and monitoring reports are submitted on a six-month basis and compliance certification is submitted on an annual basis in accordance with permit conditions A109 and B110. For more information, see comments in Section A605 of this report.

Deviations: Unit ID	Cause, Description of Deviation, and Corrective Action Taken or Tracking number	Start Date	End Date

A607 Asphalt Production – Other

F. Asphalt Plant Operations – General

Requirement: The permittee shall:

1) Install, operate, and maintain equipment in accordance with standard operating procedures, and

2) equip and operate the asphalt processing equipment such as screens, conveyor belts, and conveyor transfer points with dust control systems to control particulate matter emissions, and

3) operate the Plant in accordance with NSR Permit GCP-3-2195G, Section III, A, B, C, D, E, F, and H.

4) Ensure that no visible emissions from the facility are observed crossing the perimeter of the restricted area for no more than 5 minutes during any 2 consecutive hours during facility operations.

Monitoring: The permittee shall perform all monitoring required under NSR Permit GCP-3-2195G.

Recordkeeping: The permittee shall maintain records of all standard operating procedures, records of all maintenance and/or replacement of dust control systems, and all records required under NSR Permit GCP-3-2195G, Section IV.B, and including records of actual hours of operation, records of all required monitoring, daily and weekly total asphalt production and the weekly rolling 12 month total production, number of haul truck trips daily including materials delivery and product, frequency of haul road sweeping, and copies of the applicant's proposed maintenance requirements and records demonstrating conformance with said requirements. The permittee shall maintain records of all compliance test results for total suspended particulates (TSP), particulate matter (PM10), nitrogen oxides, carbon monoxide, and records of all opacity/visible emissions observations performed.

Reporting: The permittee shall submit reports described in Section A109 and in accordance with Section B110.

☒ **Yes** ☐ **No**

☐ **N/A**

1. Provide *Method(s) or other information or other facts used to determine the compliance status* in the "Methods:" row beneath each permit condition. 2. If you answered *No* to question 3, list *all* deviations in the *Deviations* section. For *all* Deviations that *produced* excess emissions, provide *only* **a)** the AQBCR EER Tracking Number. For *all* Deviations that *did not produce* excess emissions, provide **a)** The Unit ID, **b)** The Cause of and a Description of the Deviation, **c)** the Corrective Action, and **d)** the Start & End Dates of the deviation. Please indicate in **b)**, your *Description*, whether each deviation has been previously reported to NMED.	3. Was this facility *continuously* in compliance with *all* requirements of this condition during the reporting period?

Methods: The asphalt plant was disassembled and did not operate during 2021.

Requirement:

1) No new equipment was installed during this certification period. Operational and maintenance requirements are contained in internal plant procedures that are followed by plant operation staff.

2) Dust collection and control systems are in place on screens, conveyor belts, and conveyor transfer points to control particulate matter emissions.

3) The asphalt plant is operated in accordance with NSR Permit GCP-3-2195G, Section III, A, B, C, D, E, F, and H.

4) Both EPA Reference Methods 9 and 22 are used at the plant to determine the extent of visible emissions. Fugitive dust emissions from the plant did not cross the property boundary or exceed the five (5) minute visible emissions limit during any two consecutive hours of operation.

Monitoring: Monitoring was performed as required under NSR Permit GCP-3-2195G.

Recordkeeping: Recordkeeping conditions are met using the following methods: Standard operating procedures are in place and available on-site; maintenance and calibrations are performed annually. The asphalt plant was disassembled in 2021 and did not operate so no calibration nor maintenance took place this certification period.

The plant's operations logs contain the start time, stop time, daily and monthly hours of operation; asphalt production amounts; day when paved road was swept; and the number of truck trips. The rolling 12-month totals for production are calculated on the emissions calculation spreadsheet. Records located at the facility include fuel delivery tickets for fuel oil and asphalt oil, frequency of road sweeping, calibration procedures, and a procedure that outlines required maintenance.

All compliance test results have been provided to NMED and are available on-site.

Reporting: Emissions and monitoring reports are submitted on a six-month basis and compliance certification is submitted on an annual basis in accordance with permit conditions A109 and B110. For more information, see comments in Section A605 of this report.

Deviations: Unit ID	Cause, Description of Deviation, and Corrective Action Taken or Tracking number	Start Date	End Date

A607 Asphalt Production – Other

G. Asphalt Plant Fugitive Dust

Requirement: Fugitive dust emissions from asphalt processing equipment, including the system used to recycle fabric filter fines, shall exhibit no more than five (5) minutes of visible emissions during any two consecutive hours. This condition does not apply to fugitive dust emissions from other support operations such as storage piles, front end loaders, or materials handling around the asphalt process equipment.

Monitoring: The permittee shall perform a Method 22 test at least once per month on all screens, conveyor drop points, and hoppers during the months the asphalt plant operates. The duration of the test shall be a minimum of ten (10) minutes. If visible emissions are observed for more than two (2) minutes, the Method 22 test shall continue for two (2) hours or until scheduled operation of the plant ends.

Recordkeeping: The permittee shall maintain records of all equipment standard operating procedures, records of all maintenance and/or replacement

☒ **Yes** ☐ **No**

☐ **N/A**

1. Provide *Method(s) or other information or other facts used to determine the compliance status* in the "Methods:" row beneath each permit condition. 2. If you answered *No* to question 3, list *all* deviations in the *Deviations* section. For *all* Deviations that *produced* excess emissions, provide *only* **a)** the AQBCR EER Tracking Number. For *all* Deviations that *did not produce* excess emissions, provide **a)** The Unit ID, **b)** The Cause of and a Description of the Deviation, **c)** the Corrective Action, and **d)** the Start & End Dates of the deviation. Please indicate in **b)**, your *Description*, whether each deviation has been previously reported to NMED.	3. Was this facility *continuously* in compliance with *all* requirements of this condition during the reporting period?

of dust control systems, results of all visible emissions observations, and all records required under NSR Permit GCP-3-2195G.

Reporting: The permittee shall submit reports described in Section A109 and in accordance with Section B110.

Methods: The asphalt plant was disassembled and did not operate during 2021.

Requirement: The asphalt plant did not emit fugitive dust that exceeded five (5) minutes of visible emissions during any two (2) consecutive hours during this certification period.

Monitoring: EPA Method 22 tests are performed once per month when the plant operates. LANL has certified visible emission (opacity) readers on-site who perform monthly ten (10) minute readings using 40 CFR Part 60, Appendix A, Reference Method 22 to determine compliance with the opacity limitation. No opacity readings were taken and no visible emissions exhibited an opacity of 20% or greater during this certification period.

Recordkeeping: The standard operating procedure, maintenance and repair records, and visible emissions observations are maintained and available on-site. All other records required under the NSR permit are also available on-site.

Reporting: Emissions and monitoring reports are submitted on a six-month basis, and compliance certification on an annual basis, in accordance with permit conditions A109 and B110. For more information, see comments in Section A605 of this report.

Deviations: Unit ID	Cause, Description of Deviation, and Corrective Action Taken or Tracking number	Start Date	End Date

EQUIPMENT SPECIFIC REQUIREMENTS

BERYLLIUM ACTIVITIES

A700 Regulated Sources – Beryllium Activities

A. Table 700.A lists all of the process equipment authorized for this source category. Emission units that were identified as insignificant or trivial activities (as defined in 20.2.70.7 NMAC) and equipment not regulated pursuant to the Act are not included.

☒ **Yes** ☐ **No** ☐ **N/A**

Methods: No new equipment was added to this source category during this certification period (excluding those identified as insignificant, trivial or not regulated pursuant to the Act). An NSR application for modification of Permit No. 632 for TA-35 Building 213 – Target Fabrication Facility was submitted to NMED-AQB on December 23, 2021. This NSR application is to modify the existing beryllium machining operation and add a sputtering coating operation.

Deviations: Unit ID	Cause, Description of Deviation, and Corrective Action Taken or Tracking number	Start Date	End Date

A701 Control Equipment – Beryllium Activities

A. Table 701.A lists all of the pollution control equipment required for the applicable regulated equipment in this source category. Each emission point is identified by the same number that was assigned to it in the permit application.

☒ **Yes** ☐ **No** ☐ **N/A**

Methods: No new pollution control equipment was added and no changes were made to this source category during this certification period.

Deviations: Unit ID	Cause, Description of Deviation, and Corrective Action Taken or Tracking number	Start Date	End Date

1. Provide *Method(s) or other information or other facts used to determine the compliance status* in the "Methods:" row beneath each permit condition. 2. If you answered *No* to question 3, list *all* deviations in the *Deviations* section. For *all* Deviations that *produced* excess emissions, provide *only* **a)** the AQBCR EER Tracking Number. For *all* Deviations that *did not produce* excess emissions, provide **a)** The Unit ID, **b)** The Cause of and a Description of the Deviation, **c)** the Corrective Action, and **d)** the Start & End Dates of the deviation. Please indicate in **b)**, your *Description*, whether each deviation has been previously reported to NMED.	3. Was this facility *continuously* in compliance with *all* requirements of this condition during the reporting period?

A702 Emission Limits – Beryllium Activities

A. Table 702.A lists the emission units, and their allowable emission limits. (40 CFR 61, Subpart C; NSR Permits 632; 634-M2; 1081-M1, 1081M1-R1, 1081-M1-R3, 1081-M1-R5, and 1081-M1-R6)

☒ **Yes** ☐ **No** ☐ **N/A**

Methods: Emissions are calculated and reported on a six-month basis in accordance with permit condition A109.B. Comparison against the allowable emission limits is performed at each of these reporting periods. Allowable emission limits were not exceeded during this certification period.

Deviations: Unit ID	Cause, Description of Deviation, and Corrective Action Taken or Tracking number	Start Date	End Date

A703 Applicable Requirements – Beryllium Activities

A. The permittee shall comply with all applicable sections of the requirements listed in Table 703.A.

☒ **Yes** ☐ **No** ☐ **N/A**

Methods: LANL beryllium operations meet the requirements of 40 CFR Part 61, Subpart C, and NSR Permit Numbers 632, 634 and 1081.

Deviations: Unit ID	Cause, Description of Deviation, and Corrective Action Taken or Tracking number	Start Date	End Date

A704 Operational Limitations – Beryllium Activities

A. The equipment/operations in this source category are authorized to operate any time during the year. No monitoring, recordkeeping, or reporting requirements are required to demonstrate compliance with its hours of operation.

☐ **Yes** ☐ **No** ☒ **N/A**

Methods: There are no operating limitations, therefore no monitoring, recordkeeping, or reporting requirements are required to demonstrate compliance with its hours of operation.

Deviations: Unit ID	Cause, Description of Deviation, and Corrective Action Taken or Tracking number	Start Date	End Date

A707 Other – Beryllium Activities

A. Operational Requirements – Beryllium Activities

Source	Operating Requirements	Process Limits	Control Equipment Requirements
Sigma Facility TA-3-66	Beryllium operations will consist of registered metallographic operations, electroplating /chemical milling, and relocated machining, and arc melting/casting sources.	None	Metallographic operations and electroplating /chemical milling operations shall be conducted in aqueous solution or lubricant bath. Emissions from machining and arc melting/casting operations shall be exhausted through a HEPA filtration system prior to entering the atmosphere.

☒ **Yes** ☐ **No** ☐ **N/A**

1. Provide *Method(s) or other information or other facts used to determine the compliance status* in the "Methods:" row beneath each permit condition. 2. If you answered *No* to question 3, list *all* deviations in the *Deviations* section. For *all* Deviations that *produced* excess emissions, provide *only* **a)** the AQBCR EER Tracking Number. For *all* Deviations that *did not produce* excess emissions, provide **a)** The Unit ID, **b)** The Cause of and a Description of the Deviation, **c)** the Corrective Action, and **d)** the Start & End Dates of the deviation. Please indicate in **b)**, your *Description*, whether each deviation has been previously reported to NMED.				3. Was this facility *continuously* in compliance with *all* requirements of this condition during the reporting period?
Beryllium Technology Facility TA-3-141	The continuous emission monitor will be maintained in accordance with the Laboratory's quality program.	Beryllium processed by the facility will not exceed 10,000 pounds per calendar year. Beryllium processed by the facility will not exceed 1000 pounds per day.	All processes shall be exhausted through a HEPA filtration system prior to entering the atmosphere. Powder operations, other than closed glovebox operations, and machining operations, other than the processes used in metallographic preparation shall be exhausted through a cartridge filtration system then through the HEPA filtration system. Metallographic preparation activities shall be conducted in lubricating baths or equivalent. (NSR permit 634-M2)	
Target Fabrication Facility TA-35-213	Beryllium operations will consist of only beryllium machining and associated cleanup activities.	None	All processes shall be exhausted through a HEPA filtration system prior to entering the atmosphere.	
Plutonium Facility TA-55-PF4	Regulated beryllium activities will be ducted through the pollution control equipment and out the north or south stack of PF-4. (NSR Permit 1081-M1-R3, Specific Condition 1.b., partial, revised) The electric furnace shall be enclosed in a glove box, have a maximum operating temperature of 1600 degrees centigrade, and an inside volume space less than 1.1 cubic feet. (NSR Permit 1081-M1-R6, Specific	44 pounds of beryllium (20 kg) in any 24 hour period; 1100 pounds/year (500 kg/year) using a rolling total. (NSR Permit 1081-M1-R3, Specific Condition 1.c.)	Weld cutting, weld dressing, metallography, and electric furnace operations shall be controlled with 4 HEPA filters with a control efficiency of 99.95% each. (NSR Permit 1081-M1-R1, Condition 3, partial, revised) The non-accessible filters shall be replaced when the pressure drop across the filter either falls to levels indicating filter breakthrough or increases to levels indicative of excessive loading. (NSR Permit 1081-M1-R1, Condition 3, partial,	

1. Provide *Method(s) or other information or other facts used to determine the compliance status* in the "Methods:" row beneath each permit condition. 2. If you answered *No* to question 3, list *all* deviations in the *Deviations* section. For *all* Deviations that *produced* excess emissions, provide *only* **a)** the AQBCR EER Tracking Number. For *all* Deviations that *did not produce* excess emissions, provide **a)** The Unit ID, **b)** The Cause of and a Description of the Deviation, **c)** the Corrective Action, and **d)** the Start & End Dates of the deviation. Please indicate in **b)**, your *Description*, whether each deviation has been previously reported to NMED.	3. Was this facility *continuously* in compliance with *all* requirements of this condition during the reporting period?

	Condition 1.d., partial, revised)		revised)

Methods: TA-3-66 - In LANL's continuing effort to consolidate beryllium operations to the Beryllium Technology Facility (BTF, TA-03-141), a beryllium permitted facility that has continuous emissions monitoring for beryllium, metallographic operations were moved from TA-3-66 to the BTF. Please see the TA-3-141 section below for comments. Electroplating/chemical milling operations are conducted in aqueous solution or lubricant bath. Emissions from machining and arc melt/casting operations are exhausted through a HEPA filtration system prior to entering the atmosphere.

TA-3-141 - The continuous emission monitor is maintained in accordance with LANL's quality program. Beryllium processing records are available on-site for inspection. No process limits were exceeded during this certification period.

All processes are exhausted through a HEPA filtration system prior to entering the atmosphere. Powder operations, other than closed glovebox operations, and machining operations, other than the processes used in metallographic preparation, are exhausted through a cartridge filtration system and then through the HEPA filtration system. Metallographic preparations are conducted in lubricating baths or equivalent.

TA-35-213 - All processes are exhausted through a HEPA filtration system prior to entering the atmosphere. Beryllium operations consist of only beryllium machining and associated cleanup activities.

TA-55-PF4 - All beryllium activities are ducted through the facility's pollution control equipment and out the north or south stack of PF-4. Weld cutting, weld dressing, and metallography operations are controlled using four (4) HEPA filters with a control efficiency of 99.95% each. The non-accessible filter is replaced when the pressure differential across the filter indicates breakthrough or excessive loading.

No process limits were exceeded during this certification period.

The electric furnace did not operate during this certification period.

Deviations: Unit ID	Cause, Description of Deviation, and Corrective Action Taken or Tracking number	Start Date	End Date

A707 Other – Beryllium Activities

B. Emissions Monitoring Requirements – Beryllium Activities

Source	**Monitoring Requirements**
Sigma Facility TA-3-66	A log shall be maintained during operations, which shows the number of metallographic specimens used in the metallographic operation and the weight or volume of Be samples processed in the electroplating/chemical milling, machining, and arc melting/casting operations.
Beryllium Technology Facility TA-3-141	Facility exhaust stack will be equipped with a continuous emission monitor used to measure beryllium emissions. Cartridge and HEPA filters shall be equipped with differential pressure gauges that measure the differential pressure across the cartridge and HEPA filters while the exhaust fans are in operation. (NSR permit 634-M2)

☒ **Yes** ☐ **No**

☐ **N/A**

1. Provide *Method(s) or other information or other facts used to determine the compliance status* in the "Methods:" row beneath each permit condition. 2. If you answered *No* to question 3, list *all* deviations in the *Deviations* section. For *all* Deviations that *produced* excess emissions, provide *only* **a)** the AQBCR EER Tracking Number. For *all* Deviations that *did not produce* excess emissions, provide **a)** The Unit ID, **b)** The Cause of and a Description of the Deviation, **c)** the Corrective Action, and **d)** the Start & End Dates of the deviation. Please indicate in **b)**, your *Description*, whether each deviation has been previously reported to NMED.	3. Was this facility *continuously* in compliance with *all* requirements of this condition during the reporting period?

Target Fabrication Facility TA-35-213	Records of the stack emission test results (see Condition 2 of NSR Permit No. 632) and other data needed to determine total emissions shall be retained at the source and made available for inspection by the Department.
Plutonium Facility TA-55-PF4	The HEPA filtration systems shall be equipped with a differential pressure gauge that measures the differential pressure (inches of water) across the HEPA filters while the exhaust fans are in operation. (NSR Permit 1081-M1-R3, Condition 11) Control efficiency shall be verified by daily HEPA filter pressure drop tests and annual HEPA filter challenge tests of accessible filters. (NSR Permit 1081-M1-R1, Condition 3, partial, revised) The furnace temperature shall be continuously monitored and the flow rate from the glove box containing the furnace shall be measured once during each metal melt operation. (NSR Permit 1081-M1-R6, Condition 11, revised)

Methods: TA-3-66 - In LANL's continuing effort to consolidate beryllium operations to the Beryllium Technology Facility (BTF, TA-03-141), a beryllium permitted facility that has continuous emissions monitoring for beryllium, metallographic operations were moved from TA-3-66 to the BTF. Please see the TA-3-141 section below for comments. Log books are maintained for the weight or volume of samples processed in the electroplating/chemical milling, machining, and arc melting/casting operations. The log books are kept on-site and are available for inspection. HEPA filter challenge tests were performed in May 2021.

TA-3-141 - The facility exhaust stack has a built-in sampling system used to continuously sample beryllium emissions. Cartridge and HEPA filters are equipped with differential pressure gauges that measure differential pressure when exhaust fans are operating and the facility is occupied. HEPA filter challenge tests were performed in May 2021.

TA-35-213 - A copy of stack emission test results as well as other data needed to determine total emissions are retained at the source and are available for inspection. Log books documenting beryllium processing are on-site and are available for inspection. HEPA filter challenge tests were performed in July 2021.

TA-55-PF4 - The HEPA filtration system contains a differential pressure gauge that measures differential pressure across the HEPA filters while the exhaust fans are in operation. The control efficiency is verified by daily HEPA filter pressure drop tests. Annual HEPA filter challenge tests are performed to verify filter control efficiency. The HEPA filter challenge tests were performed in July 2021.

The electric furnace did not operate during this certification period.

Deviations: Unit ID	Cause, Description of Deviation, and Corrective Action Taken or Tracking number	Start Date	End Date

A707 Other – Beryllium Activities

1. Provide *Method(s) or other information or other facts used to determine the compliance status* in the "Methods:" row beneath each permit condition. 2. If you answered *No* to question 3, list *all* deviations in the *Deviations* section. For *all* Deviations that *produced* excess emissions, provide *only* **a)** the AQBCR EER Tracking Number. For *all* Deviations that *did not produce* excess emissions, provide **a)** The Unit ID, **b)** The Cause of and a Description of the Deviation, **c)** the Corrective Action, and **d)** the Start & End Dates of the deviation. Please indicate in **b)**, your *Description*, whether each deviation has been previously reported to NMED.	3. Was this facility *continuously* in compliance with *all* requirements of this condition during the reporting period?

C. Recordkeeping Requirements – Beryllium Activities

Source	Recordkeeping Requirements
Sigma Facility TA-3-66	Recordkeeping for this source is specified in Condition A707.B.
Beryllium Technology Facility TA-3-141	Generate and maintain beryllium inventory records to demonstrate compliance with the 10,000 pounds of beryllium per calendar year and the 1000 pounds of beryllium per day processing limit. Record pressure drop across the cartridge and HEPA filters once per day that the exhaust fans are in operation and the facility is occupied. Record control equipment maintenance and repair activities. (NSR permit 634-M2)
Target Fabrication Facility TA-35-213	Recordkeeping for this source is specified in Condition A707.B.
Plutonium Facility TA-55-PF4	Stack emission test results and facility operating parameters including a daily record of the pressure drop measured across each appropriate HEPA plenum filtration stage, when the exhaust fans are operating. (NSR Permit 1081-M1-R3, Condition 9, partial, revised) A copy of the annual HEPA test, a log of the daily pressure drop readings and a control equipment maintenance log shall be kept. This documentation shall be provided upon request. (NSR Permit 1081-M1-R1, Condition 3, partial, revised) A log of the filter replacement shall be kept and shall be made available to the Department personnel upon request. (NSR Permit 1081-M1-R1, Condition 3, partial, revised) The permittee shall keep records of the number and weight of classified parts processed during a 24-hour period and year using a rolling total. Records shall be made available to properly cleared Department personnel upon request. (NSR Permit 1081-M1-R3, Condition 9, partial, revised) The permittee shall for each use of the furnace record the following operating parameters: metal type, theoretical melting point of the metal, metal melt duration once melting is commenced, maximum furnace temperature and glove box flow rate. (NSR Permit 1081-M1-R6, Condition 9, partial, revised) A record of the furnace's internal volume shall be maintained at the facility.

☒ **Yes** ☐ **No**

☐ **N/A**

1. Provide *Method(s) or other information or other facts used to determine the compliance status* in the "Methods:" row beneath each permit condition. 2. If you answered *No* to question 3, list *all* deviations in the *Deviations* section. For *all* Deviations that *produced* excess emissions, provide *only* **a)** the AQBCR EER Tracking Number. For *all* Deviations that *did not produce* excess emissions, provide **a)** The Unit ID, **b)** The Cause of and a Description of the Deviation, **c)** the Corrective Action, and **d)** the Start & End Dates of the deviation. Please indicate in **b)**, your *Description*, whether each deviation has been previously reported to NMED.	3. Was this facility *continuously* in compliance with *all* requirements of this condition during the reporting period?

	(NSR Permit 1081-M1-R6, Condition 9, partial, revised)

Methods: TA-3-66 - Recordkeeping for this source is specified in Condition A707.B.

TA-3-141 - Inventory records are maintained to demonstrate compliance with beryllium process limits. Records of pressure drop across the cartridge and HEPA filters are performed daily when the exhaust fans are in operation and the facility is occupied. Control equipment maintenance and repair activities are recorded.

TA-3-213 - Recordkeeping for this source is specified in Condition A707.B.

TA-55-PF4 - A copy of the stack emission test results are retained at the source and available for inspection. HEPA filter challenge tests are performed annually. Filter replacement and control equipment maintenance and repair records are kept and available on-site for inspection. Process records are available that contain the number and weight of classified parts processed during a 24-hour period and annual rolling total.

The electric furnace did not operate during this certification period.

Deviations: Unit ID	Cause, Description of Deviation, and Corrective Action Taken or Tracking number	Start Date	End Date

A707 Other – Beryllium Activities

D. Reporting Requirements – Beryllium Activities

Source	**Reporting Requirements**
Sigma Facility TA-3-66	The permittee shall submit reports described in Section A109 and in accordance with Section B110.
Beryllium Technology Facility TA-3-141	Anticipated date of initial startup of each new or modified source not less than thirty (30) days prior to the date. Actual date of initial startup of each new or modified source within fifteen (15) days after the startup date. Provide the date when each new or modified emission source reaches the maximum production rate at which it will operate within fifteen (15) days after that date. Notify the Department within 60 days after each calendar quarter of the facility's compliance status with the permitted emission rate from the continuous monitoring system. Provide any data generated by activities described in the Quality Assurance Project Plan (QAPP) that will assist the Air Quality Bureau's Enforcement Section in determining the reliability of the methodology used for demonstrating compliance with the permitted emission rate within 45 days of such a request. The permittee shall submit reports described in Section A109 and in accordance with Section B110.
Target Fabrication Facility	The permittee shall submit reports described in Section A109 and in accordance with Section B110.

☒ **Yes** ☐ **No**

☐ **N/A**

1. Provide *Method(s) or other information or other facts used to determine the compliance status* in the "Methods:" row beneath each permit condition. 2. If you answered *No* to question 3, list *all* deviations in the *Deviations* section. For *all* Deviations that *produced* excess emissions, provide *only* **a)** the AQBCR EER Tracking Number. For *all* Deviations that *did not produce* excess emissions, provide **a)** The Unit ID, **b)** The Cause of and a Description of the Deviation, **c)** the Corrective Action, and **d)** the Start & End Dates of the deviation. Please indicate in **b)**, your *Description*, whether each deviation has been previously reported to NMED.	3. Was this facility *continuously* in compliance with *all* requirements of this condition during the reporting period?

TA-35-213	
Plutonium Facility TA-55-PF4	Stack emission test results and facility operating parameters will be made available to Department personnel upon request. Reports may be required to be submitted to the Department if inspections of the source indicate noncompliance with this permit or as a means of determining compliance. The permittee shall submit reports described in Section A109 and in accordance with Section B110.

Methods: For all beryllium sources, reports are submitted in accordance with permit conditions A109 and in accordance B110. For more information, see Section A605 in this report.

There were no new or modified emission sources during this certification period.

TA-3-141 - Quarterly beryllium reports, containing continuous monitoring system data from the Beryllium Technology Facility, are also submitted to NMED. Reports during this certification period were submitted within 60 days following each calendar quarter.

The following reports were submitted in this compliance period:

Fourth quarter of 2020 was submitted on February 2, 2021 (Activity No.: 000856-02022021-01)

First quarter of 2021 was submitted on May 6, 2021 (Activity No.: 000856-05052021-01)

Second quarter of 2021 was submitted on August 10, 2021 (Activity No.: 000856-08102021-01)

Third quarter of 2021 was submitted on November 10, 2021 (Activity No.: 000856-11102021-01)

Deviations: Unit ID	Cause, Description of Deviation, and Corrective Action Taken or Tracking number	Start Date	End Date

EQUIPMENT SPECIFIC REQUIREMENTS

EXTERNAL COMBUSTION

A800 Regulated Sources – External Combustion

☒ **Yes** ☐ **No**

☐ **N/A**

A. Table 800.A lists all of the process equipment authorized for this source category.

Methods: There were no changes to the list of permitted boilers during this compliance certification period. RLUOB-BHW-4 has not been installed.

Deviations: Unit ID	Cause, Description of Deviation, and Corrective Action Taken or Tracking number	Start Date	End Date

A801 Control Equipment – External Combustion

A. Table 801.A lists all of the pollution control equipment required for the applicable regulated equipment in this source category. Each emission point is identified by the same number that was assigned to it in the permit application.

1. Provide *Method(s) or other information or other facts used to determine the compliance status* in the "Methods:" row beneath each permit condition. 2. If you answered *No* to question 3, list *all* deviations in the *Deviations* section. For *all* Deviations that *produced* excess emissions, provide *only* **a)** the AQBCR EER Tracking Number. For *all* Deviations that *did not produce* excess emissions, provide **a)** The Unit ID, **b)** The Cause of and a Description of the Deviation, **c)** the Corrective Action, and **d)** the Start & End Dates of the deviation. Please indicate in **b)**, your *Description*, whether each deviation has been previously reported to NMED.				3. Was this facility *continuously* in compliance with *all* requirements of this condition during the reporting period?
Methods: No new pollution control equipment was added and no changes were made to this source category during this certification period. Unit RLUOB-BHW-4 has not been installed.				☒ **Yes** ☐ **No** ☐ **N/A**
Deviations: Unit ID	Cause, Description of Deviation, and Corrective Action Taken or Tracking number	Start Date	End Date	
A802 Emission Limits – External Combustion **A.** Table 802.A lists specific emission units and their allowable emission limits. (40 CFR 50; Paragraphs 1, 7, and 8 of 20.2.70.302.A NMAC; 40 CFR 60, Subpart Dc).				☒ **Yes** ☐ **No** ☐ **N/A**
Methods: Emissions are calculated and reported on a six-month basis in accordance with permit condition A109.B. Comparison against the allowable emission limits is performed at each of these reporting periods. Allowable emission limits were not exceeded during this certification period.				
Deviations: Unit ID	Cause, Description of Deviation, and Corrective Action Taken or Tracking number	Start Date	End Date	
A802 Emission Limits – External Combustion **B.** Table 802.B lists specific emission units and their allowable emission limits. (40 CFR 50; Paragraphs 1, 7, and 8 of 20.2.70.302.A NMAC; 40 CFR 60, Subpart Dc; NSR Permit 2195N-R2)				☒ **Yes** ☐ **No** ☐ **N/A**
Methods: Emissions are calculated and reported on a six-month basis in accordance with permit condition A109.B. Comparison against the allowable emission limits is performed at each of these reporting periods. Allowable emission limits were not exceeded during this certification period.				
Deviations: Unit ID	Cause, Description of Deviation, and Corrective Action Taken or Tracking number	Start Date	End Date	
A802 Emission Limits – External Combustion **C.** Units RLUOB-BHW-1 through - 4 shall not emit oxides of nitrogen in excess of 30 ppmv, corrected to 3% oxygen on a dry basis. This emissions limitation applies to natural gas fuel only. (NSR Permit 2195N-R2, Specific Condition 1.f., partial, revised)				☒ **Yes** ☐ **No** ☐ **N/A**
Methods: Nitrogen oxides (NOx) concentrations were analyzed during the initial compliance test for the RLUOB boilers: RLUOB-BHW-1; RLUOB-BHW-2; and RLUOB-BHW-3. NOx emissions from the tested boilers were well below the 30 ppmv limit on a dry basis. Unit RLUOB-BHW-4 has not been installed.				
Deviations: Unit ID	Cause, Description of Deviation, and Corrective Action Taken or Tracking number	Start Date	End Date	
A803 Applicable Requirements – External Combustion **A.** The permittee shall comply with all applicable sections of the requirements listed in Table 803.A.				

1. Provide *Method(s) or other information or other facts used to determine the compliance status* in the "Methods:" row beneath each permit condition. 2. If you answered *No* to question 3, list *all* deviations in the *Deviations* section. For *all* Deviations that *produced* excess emissions, provide *only* **a)** the AQBCR EER Tracking Number. For *all* Deviations that *did not produce* excess emissions, provide **a)** The Unit ID, **b)** The Cause of and a Description of the Deviation, **c)** the Corrective Action, and **d)** the Start & End Dates of the deviation. Please indicate in **b)**, your *Description*, whether each deviation has been previously reported to NMED.				3. Was this facility *continuously* in compliance with *all* requirements of this condition during the reporting period?
Methods: Emission units listed in Table 803.A meet the applicable requirements listed. RLUOB-BHW-4 has not been installed. Monthly fuel monitoring is recorded on all listed emission units. The fuel monitoring records are collected monthly and maintained on-site.				☒ **Yes** ☐ **No** ☐ **N/A**
Deviations: Unit ID	Cause, Description of Deviation, and Corrective Action Taken or Tracking number	Start Date	End Date	

A804 Operational Limitations – External Combustion				
A. All external combustion equipment except Units RLUOB-BHW-1 through -4 when operating with fuel oil is authorized to operate any time during the year. No monitoring, recordkeeping, or reporting requirements are required to demonstrate compliance with its hours of operation.				☒ **Yes** ☐ **No** ☐ **N/A**
Methods: Fuel oil was not used during this certification period by units RLUOB-BHW-1, RLUOB-BHW-2 and RLUOB-BHW-3. Unit RLUOB-BHW-4 has not been installed.				
Deviations: Unit ID	Cause, Description of Deviation, and Corrective Action Taken or Tracking number	Start Date	End Date	

A804 Operational Limitations – External Combustion				
B. Units RLUOB-BHW-1 through -4 shall be operated on fuel oil for no more than 48 hours per year per boiler for non-emergency maintenance and readiness testing. This condition establishes exemption from 40 CFR 63, Subpart JJJJJJ.				☒ **Yes** ☐ **No** ☐ **N/A**
Methods: Hours of operation for each boiler are tracked by facility personnel. Fuel oil was not used during this certification period. RLUOB-BHW-4 has not been installed.				
Deviations: Unit ID	Cause, Description of Deviation, and Corrective Action Taken or Tracking number	Start Date	End Date	

A804 Operational Limitations – External Combustion				
C. Total annual fuel oil consumption for Units RLUOB-BHW-1 through -4 shall not exceed 289,100 gallons on a rolling 365-day total basis.				☒ **Yes** ☐ **No** ☐ **N/A**
Methods: Total annual fuel oil use is tracked using a rolling 365-day total basis and is compared to the fuel use limit. Fuel oil was not used during this certification period. RLUOB-BHW-4 has not been installed.				
Deviations: Unit ID	Cause, Description of Deviation, and Corrective Action Taken or Tracking number	Start Date	End Date	

A805 Fuel Sulfur Requirements – External Combustion				
A. All Boilers and Heaters (except Units RLUOB-BHW-1 through -4)				
Requirement: All boilers and heaters, except Units RLUOB-BHW-1 through -4 and the Power Plant addressed in Section A1300 shall combust only natural gas containing no more than 2 grains of total sulfur per 100 dry standard cubic feet.				☒ **Yes** ☐ **No** ☐ **N/A**
Monitoring: None.				
Recordkeeping: The permittee shall demonstrate compliance with the natural gas limit on total sulfur content by maintaining records of a current, valid purchase contract, tariff sheet or transportation contract for the gaseous fuel, or fuel gas analysis, specifying the allowable limit or less. If fuel				

1. Provide *Method(s) or other information or other facts used to determine the compliance status* in the "Methods:" row beneath each permit condition. 2. If you answered *No* to question 3, list *all* deviations in the *Deviations* section. For *all* Deviations that *produced* excess emissions, provide *only* **a)** the AQBCR EER Tracking Number. For *all* Deviations that *did not produce* excess emissions, provide **a)** The Unit ID, **b)** The Cause of and a Description of the Deviation, **c)** the Corrective Action, and **d)** the Start & End Dates of the deviation. Please indicate in **b)**, your *Description*, whether each deviation has been previously reported to NMED.	3. Was this facility *continuously* in compliance with *all* requirements of this condition during the reporting period?

gas analysis is used, the analysis shall not be older than one year.

Reporting: The permittee shall submit reports described in Section A109 and in accordance with Section B110.

Methods: Requirement: A natural gas transportation contract is in place, and states that gas provided to LANL will be pipeline quality and contain no more than three quarters (3/4) grains of total sulfur per one hundred (100) dry standard cubic feet.

Monitoring: N/A

Recordkeeping: A copy of LANL's natural gas transportation contract is maintained on-site.

Reporting: Emissions and monitoring reports are submitted on a six-month basis and compliance certification is submitted on an annual basis in accordance with permit conditions A109 and B110. For more information, see comments in Section A605 of this report.

Deviations: Unit ID	Cause, Description of Deviation, and Corrective Action Taken or Tracking number	Start Date	End Date

A805 Fuel Sulfur Requirements – External Combustion

B. Units RLUOB-BHW-1 through -4

Requirement: Units RLUOB-BHW-1 through -4 shall combust either natural gas containing no more than 2.0 grains of total sulfur per 100 dry standard cubic feet or No. 2 fuel oil containing no more than 0.5 wt% total sulfur. (NSR Permit 2195N-R2, Specific Condition 1.c.)

Monitoring: None.

Recordkeeping: The permittee shall demonstrate compliance with the natural gas limit and/or fuel oil limit on total sulfur content by maintaining records of a current, valid purchase contract, tariff sheet or transportation contract for the gaseous or liquid fuel, or fuel analysis, specifying the allowable limit or less. If a fuel analysis is used, the analysis shall not be older than one year. (NSR Permit 2195N-R2, Specific Condition 3.c., revised) Alternatively, compliance may be demonstrated by keeping a receipt or invoice from a commercial fuel supplier with each fuel delivery, which shall include the delivery date, the fuel type delivered, and amount of fuel delivered, and the maximum sulfur content of the fuel.

Reporting: The permittee shall submit reports described in Section A109 and in accordance with Section B110.

☒ **Yes** ☐ **No**

☐ **N/A**

1. Provide *Method(s) or other information or other facts used to determine the compliance status* in the "Methods:" row beneath each permit condition. 2. If you answered *No* to question 3, list *all* deviations in the *Deviations* section. For *all* Deviations that *produced* excess emissions, provide *only* **a)** the AQBCR EER Tracking Number. For *all* Deviations that *did not produce* excess emissions, provide **a)** The Unit ID, **b)** The Cause of and a Description of the Deviation, **c)** the Corrective Action, and **d)** the Start & End Dates of the deviation. Please indicate in **b)**, your *Description*, whether each deviation has been previously reported to NMED.	3. Was this facility *continuously* in compliance with *all* requirements of this condition during the reporting period?

Methods: Requirement: A natural gas transportation contract is in place, and states that gas provided to LANL will be pipeline quality and contain no more than three quarters (3/4) grains of total sulfur per one hundred (100) dry standard cubic feet.

Fuel oil is not currently used as the fuel system for RLUOB BHW-1 through 3. If fuel oil is burned in the future, the boilers will use only Ultra Low Sulfur Diesel (ULSD) containing no more than 0.0015 wt% total sulfur. Sulfur content will be documented in fuel manifests and bill of ladings.

Monitoring: N/A

Recordkeeping: A copy of the natural gas transportation contract is maintained on-site. Copies of the fuel manifests and bill of ladings for fuel oil are maintained in electronic files. No fuel oil was purchased or used for the RLUOB boilers during this certification period.

Reporting: Emissions and monitoring reports are submitted on a six-month basis, and compliance certification is submitted on an annual basis in accordance with permit conditions A109 and B110. For more information, see comments in Section A605 of this report.

Deviations: Unit ID	Cause, Description of Deviation, and Corrective Action Taken or Tracking number	Start Date	End Date

A806 20.2.61 NMAC Opacity – External Combustion

A. All Boilers and Heaters (except Units RLUOB-BHW-1 through -4)

Requirement: Exhaust emissions from these external combustion sources shall not exceed 20% opacity averaged over a 10-minute period.

Monitoring: Use of natural gas fuel meeting the requirement at Condition A805.A constitutes compliance with 20.2.61 NMAC unless opacity exceeds 20% averaged over a 10-minute period. When any visible emissions are observed during steady state operation and are determined to be not due to condensed water vapor only, opacity shall be measured over a 10-minute period, in accordance with the procedures at 40 CFR 60, Appendix A, Method 9 as required by 20.2.61.114 NMAC.

Recordkeeping: The permittee shall record dates of any opacity measurements and the corresponding opacity readings.

Reporting: The permittee shall report dates of any opacity measurements and the corresponding opacity readings. The permittee shall submit reports described in Section A109 and in accordance with Section B110.

☒ **Yes** ☐ **No**

☐ **N/A**

1. Provide *Method(s) or other information or other facts used to determine the compliance status* in the "Methods:" row beneath each permit condition. 2. If you answered *No* to question 3, list *all* deviations in the *Deviations* section. For *all* Deviations that *produced* excess emissions, provide *only* **a)** the AQBCR EER Tracking Number. For *all* Deviations that *did not produce* excess emissions, provide **a)** The Unit ID, **b)** The Cause of and a Description of the Deviation, **c)** the Corrective Action, and **d)** the Start & End Dates of the deviation. Please indicate in **b)**, your *Description*, whether each deviation has been previously reported to NMED.	3. Was this facility *continuously* in compliance with *all* requirements of this condition during the reporting period?
Methods: Requirement: LANL has certified visible emission readers on-site who perform observations using 40 CFR 60, Appendix A, Method 9 to determine compliance with the opacity limitation. No opacity measurements and corresponding opacity readings were required during this certification period. Monitoring: Use of natural gas for combustion meets the requirement at Condition A805.A. Recordkeeping: A standard form is used for all opacity measurements. The form includes the date of measurement and opacity observed. No opacity measurements and corresponding opacity readings were required during this certification period. Reporting: Emissions and monitoring reports are submitted on a six-month basis and compliance certification is submitted on an annual basis in accordance with permit conditions A109 and B110. For more information, see comments in Section A605 of this report.	

Deviations: Unit ID	Cause, Description of Deviation, and Corrective Action Taken or Tracking number	Start Date	End Date

A806 20.2.61 NMAC Opacity – External Combustion **B. Units RLUOB-BHW-1 through -4: Natural Gas-Fired** **Requirement**: Exhaust emissions from these external combustion sources shall not exceed 20% opacity averaged over a 10-minute period. **Monitoring**: Use of natural gas fuel meeting the requirement at Condition A805.A constitutes compliance with 20.2.61 NMAC unless opacity exceeds 20% averaged over a 10-minute period. When any visible emissions are observed during steady state operation and are determined to be not due to condensed water vapor only, opacity shall be measured over a 10-minute period, in accordance with the procedures at 40 CFR 60, Appendix A, Method 9 as required by 20.2.61.114 NMAC. **Recordkeeping**: The permittee shall record dates of any opacity measurements and the corresponding opacity readings. **Reporting**: The permittee shall report dates of any opacity measurements and the corresponding opacity readings. The permittee shall submit reports described in Section A109 and in accordance with Section B110.	☒ **Yes** ☐ **No** ☐ **N/A**
Methods: Requirement: LANL has certified visible emission readers on-site who perform observations using 40 CFR 60, Appendix A, Method 9 to determine compliance with the opacity limitation. No visible emissions were observed during steady state operations during this certification period. Monitoring: The natural gas used by these units meets the requirement of Condition A805.A. Recordkeeping: A standard form is used for all opacity measurements. The form includes the date of measurement and opacity observed. No opacity measurements and corresponding opacity readings were required during this certification period. Reporting: Emissions and monitoring reports are submitted on a six-month basis and compliance certification on an annual basis in accordance with permit conditions A109 and B110. For more information, see comments in Section A605 of this report.	

Deviations: Unit ID	Cause, Description of Deviation, and Corrective Action Taken or Tracking number	Start Date	End Date

A806 20.2.61 NMAC Opacity – External Combustion	

1. Provide *Method(s) or other information or other facts used to determine the compliance status* in the "Methods:" row beneath each permit condition. 2. If you answered *No* to question 3, list *all* deviations in the *Deviations* section. For *all* Deviations that *produced* excess emissions, provide *only* **a)** the AQBCR EER Tracking Number. For *all* Deviations that *did not produce* excess emissions, provide **a)** The Unit ID, **b)** The Cause of and a Description of the Deviation, **c)** the Corrective Action, and **d)** the Start & End Dates of the deviation. Please indicate in **b)**, your *Description*, whether each deviation has been previously reported to NMED.	3. Was this facility *continuously* in compliance with *all* requirements of this condition during the reporting period?

C. Units RLUOB-BHW-1 through -4: Fuel Oil-Fired

Requirement: Exhaust emissions from these external combustion sources shall not exceed 20% opacity averaged over a 10-minute period.

Monitoring: The permittee shall perform a least one (1) opacity observation each day that fuel oil is used to fire any of Units RLUOB-BHW-1 through -4. Opacity shall be measured over a 10-minute period, in accordance with the procedures at 40 CFR 60, Appendix A, Method 9 as required by 20.2.61.114 NMAC. (NSR Permit 2195N-R2, Specific Condition 3.d., revised)

Recordkeeping: The permittee shall record dates of any opacity measurements and the corresponding opacity readings. (NSR Permit 2195N-R2, Specific Condition 4.b., revised)

Reporting: The permittee shall report dates of any opacity measurements and the corresponding opacity readings. The permittee shall submit reports described in Section A109 and in accordance with Section B110.

☒ **Yes** ☐ **No** ☐ **N/A**

Methods: Requirement: LANL has certified visible emission readers on-site who perform observations using 40 CFR 60, Appendix A, Method 9 to determine compliance with the opacity limits.

Monitoring: No fuel oil was used in these units during this certification period. No opacity measurements were taken during this certification period.

Recordkeeping: The opacity form includes the date of measurement and opacity observed. No fuel oil was burned during this certification period, and therefore, no opacity readings were taken and no records were generated.

Reporting: Emissions and monitoring reports are submitted on a six-month basis and compliance certification submitted on an annual basis in accordance with permit conditions A109 and B110. For more information, see comments in Section A605 of this report.

Deviations: Unit ID	Cause, Description of Deviation, and Corrective Action Taken or Tracking number	Start Date	End Date

A807 Other – External Combustion

A. Natural Gas Fuel Usage (Sources listed in Table 800.A except RLUOB-BHW-1 through -4)

Requirement: The combined natural gas fuel usage shall be limited to 870 MMscf/y. This limitation shall apply to all boilers and heaters listed in Table 800.A except Units RLUOB-BHW-1 through -4, but including all other boilers and heaters at the Facility that qualify as Title V Insignificant Activities.

Monitoring: The permittee shall monitor the monthly total volumetric flow of natural gas to Units TA-55-6-BHW-1 and TA-55-6-BHW-2 through use of a totalizing flow meter.

☒ **Yes** ☐ **No** ☐ **N/A**

Recordkeeping: The permittee shall:

1) Calculate the monthly rolling 12-month total natural gas fuel usage for the emission units listed in Table 800.A except Units RLUOB-BHW-1 through -4.

2) Calculate the actual emissions rate for the emission units listed in Table 800.A except Units RLUOB-BHW-1 through -4. The calculation shall be based on the actual fuel usage of Units equipped with individual flow meters and the Facility-Wide metered or estimated natural gas usage.

3) Calculate the semiannual and annual total emissions rate (tons/year) for this source category and compare them to the emission limits in Table

1. Provide *Method(s) or other information or other facts used to determine the compliance status* in the "Methods:" row beneath each permit condition. 2. If you answered *No* to question 3, list *all* deviations in the *Deviations* section. For *all* Deviations that *produced* excess emissions, provide *only* **a)** the AQBCR EER Tracking Number. For *all* Deviations that *did not produce* excess emissions, provide **a)** The Unit ID, **b)** The Cause of and a Description of the Deviation, **c)** the Corrective Action, and **d)** the Start & End Dates of the deviation. Please indicate in **b)**, your *Description*, whether each deviation has been previously reported to NMED.	3. Was this facility *continuously* in compliance with *all* requirements of this condition during the reporting period?

802.A. The permittee shall maintain records in accordance with Section B109.

Reporting: The permittee shall submit reports described in Section A109 and in accordance with Section B110.

Methods: Requirement: For units listed under this permit condition, a 12-month rolling total of natural gas used is calculated and recorded each month. The rolling total is compared to the fuel use limit each month. Natural gas usage limits were not exceeded during this certification period.

Monitoring: Units TA-55-6-BHW-1 and TA-55-6-BHW-2 have totalizing volumetric flow meters in place to monitor monthly natural gas use.

Recordkeeping: 1) Monthly rolling 12-month total natural gas fuel use is calculated for the permitted units listed in Table 800.A.

2) The actual emission rate is calculated for the units listed in Table 800.A. This calculation uses actual fuel use data from individual unit flow meters and facility-wide metered natural gas.

3) The emissions rate is calculated every six months and annually for this source category, and compared to the permit limits. Records are maintained in accordance with Section B109.

Reporting: Emissions and monitoring reports are submitted on a six-month basis and compliance certification on an annual basis in accordance with permit conditions A109 and B110. For more information, see comments in Section A605 of this report.

Deviations: Unit ID	Cause, Description of Deviation, and Corrective Action Taken or Tracking number	Start Date	End Date

A807 Other – External Combustion

B. Natural Gas and Fuel Oil Usage (Units RLUOB-BHW-1 through -4)

Requirement: The permittee shall comply with the emission limits in Table 802.B for each fuel type.

Monitoring: The permittee shall:

1) Monitor the monthly total volumetric flow of natural gas to Units RLUOB-BHW-1 through -4 using a totalizing flow meter. (NSR Permit 2195N-R2, Specific Condition 3.a., partial, revised)

2) Monitor the daily fuel oil consumption during which any of the 4 RLUOB boilers are fired with this fuel type. (NSR Permit 2195N-R2, Specific Condition 3.a, partial, revised)

3) Monitor the hours of operation for each boiler when fired on fuel oil and during non-emergency maintenance and readiness testing.

Recordkeeping: The permittee shall:

1) Calculate and record the annual fuel oil usage for Units RLUOB-BHW-1 through -4 as a daily rolling 365-day total.

2) Calculate and record the semiannual and calendar year total emissions rate (tons/year) for each fuel type and for the combination of both fuels compare to the emission limits in Table 802.B.

3) Record the annual hours of operation of each boiler when fired on fuel oil during non-emergency maintenance and readiness testing and compare to the limitation at Condition A804.B.

☒ **Yes** ☐ **No**

☐ **N/A**

1. Provide *Method(s) or other information or other facts used to determine the compliance status* in the "Methods:" row beneath each permit condition. 2. If you answered *No* to question 3, list *all* deviations in the *Deviations* section. For *all* Deviations that *produced* excess emissions, provide *only* **a)** the AQBCR EER Tracking Number. For *all* Deviations that *did not produce* excess emissions, provide **a)** The Unit ID, **b)** The Cause of and a Description of the Deviation, **c)** the Corrective Action, and **d)** the Start & End Dates of the deviation. Please indicate in **b)**, your *Description*, whether each deviation has been previously reported to NMED.	3. Was this facility *continuously* in compliance with *all* requirements of this condition during the reporting period?

4) The permittee shall maintain records in accordance with Section B109.

Reporting: The permittee shall submit reports described in Section A109 and in accordance with Section B110.

Methods: Requirement: The initial compliance test was used to demonstrate compliance with the emission limits for natural gas use. Vendor data are also used to determine compliance with emission limits for fuel oil and natural gas. All concentrations and emission rates were below permitted limits in Table 802.B.

Monitoring: 1) A totalizing flow meter is in place and measures natural gas used by the RLUOB boilers.

2) Daily fuel oil consumption is monitored by facility personnel using meter readings from each boiler. No fuel oil was burned during this certification period.

3) The hours of operation of each boiler are recorded by facility personnel each time a boiler is run on fuel oil. The purpose of running the boilers is also recorded.

Recordkeeping: 1) Annual fuel oil usage is calculated and recorded on a daily rolling 365-day total. No fuel oil was burned during this certification period.

2) The emissions rate is calculated on a six-month and annual basis for each fuel type and for both fuels combined. Emissions are compared to permit limits and data are provided to NMED in accordance with Permit condition A109.

3) Annual hours of operation for each boiler are recorded when fired on fuel oil during non-emergency use.

The total hours are compared to the hour limit in permit condition A804.B. No fuel oil was used during this certification period and therefore no records were generated.

4) Records are maintained in accordance with Section B109.

Reporting: Emissions and monitoring reports are submitted on a six-month basis as described in Section A109 and in accordance with Section B110. See Section A109 in this report.

Deviations: Unit ID	Cause, Description of Deviation, and Corrective Action Taken or Tracking number	Start Date	End Date

A807 Other – External Combustion

C. 40 CFR 60, Subpart Dc (Units TA-55-6-BHW-1, TA-55-6-BHW-2, RLUOB-BHW-1 through -3)

Requirement: The units are subject to 40 CFR 60, Subpart Dc and the permittee shall comply with the following applicable requirements:

1. When combusting oil in the affected boilers, meet the 0.5 weight percent fuel sulfur standard in 40 CFR 60.42c(d). This standard applies at all times per §60.42c(i). The permittee shall demonstrate compliance per the requirements of §60.42c(h).

☒ **Yes** ☐ **No**

☐ **N/A**

Monitoring: The permittee shall comply with the fuel supplier certification requirements in 40 CFR 60.46c(e). The permittee shall monitor fuel usage to meet the recordkeeping requirements of 40 CFR 60.48c(g).

Recordkeeping: The permittee shall comply with the recordkeeping requirements of 40 CFR 60.48c(c), (f) and (g) 40 CFR 60.7(b) and (f) and maintain

1. Provide *Method(s) or other information or other facts used to determine the compliance status* in the "Methods:" row beneath each permit condition. 2. If you answered *No* to question 3, list *all* deviations in the *Deviations* section. For *all* Deviations that *produced* excess emissions, provide *only* **a)** the AQBCR EER Tracking Number. For *all* Deviations that *did not produce* excess emissions, provide **a)** The Unit ID, **b)** The Cause of and a Description of the Deviation, **c)** the Corrective Action, and **d)** the Start & End Dates of the deviation. Please indicate in **b)**, your *Description*, whether each deviation has been previously reported to NMED.	3. Was this facility *continuously* in compliance with *all* requirements of this condition during the reporting period?

the records according to §60.48c(i) except when records are required to be maintained for a longer time period in accordance with Section B109.

Reporting: The permittee shall comply with the initial notification requirements of 40 CFR 60.48c(a) and 40 CFR 60.7(a)(1), (a)(4) and (g) and the periodic reporting requirements of 40 CFR 60.48c(b), (d), (e)(11) and (f). Reports shall be submitted according to §60.48c(j). The reporting period may be modified to coincide with the Semi-Annual reporting period in Section A109. The permittee shall report in accordance with Section B110.

Methods: Requirement: Units TA-55-6-BHW-1, TA-55-6-BHW-2, RLUOB-BHW-1, RLUOB-BHW-2, and RLUOB-BHW-3 meet the requirements of 40 CFR Part 60, Subparts A and Dc. Notification requirements were met through source startup notifications and initial permit applications.

Monitoring: Natural gas sulfur requirements are tracked and addressed in the natural gas transportation contract. The amount of fuel oil used is monitored and recorded on a monthly basis. Fuel oil is not currently used as the fuel system for RLUOB BHW-1 through 3 and Units TA-55-6-BHW-1, TA-55-6-BHW-2 only burn natural gas. If fuel oil is burned in the future, the boilers will use only Ultra Low Sulfur Diesel (ULSD) containing no more than 0.0015 wt% total sulfur. Sulfur content will be documented in fuel manifests and bill of ladings. No fuel oil was purchased or used during this certification period.

Recordkeeping: Fuel sulfur content information and fuel use records are maintained on-site for at least five (5) years as required by the operating permit.

Reporting: Notification requirements were met through source startup notifications and initial permit applications. Emissions and monitoring reports are submitted on a six-month basis and compliance certification on an annual basis in accordance with permit conditions A109 and B110. For more information, see comments in Section A605 of this report.

Deviations: Unit ID	Cause, Description of Deviation, and Corrective Action Taken or Tracking number	Start Date	End Date

A807 Other – External Combustion

D. 40 CFR 60, Subpart Dc (New Unit RLUOB-BHW-4)

Requirement: This unit is subject to 40 CFR 60, Subpart Dc and the permittee shall comply with the following applicable requirements:

1. When combusting oil in the affected boilers, meet the 0.5 weight percent fuel sulfur standard in 40 CFR 60.42c(d), and (g). This standard applies at all times per §60.42c(i). The permittee shall demonstrate compliance per the requirements of §60.42c(h).
2. For new boiler RLUOB-BHW-4, the permittee shall demonstrate initial compliance with the SO2 standard through a certification from the fuel supplier per 40 CFR 60.44c(h).

☐ **Yes** ☐ **No**

☒ **N/A**

Monitoring: The permittee shall comply with the fuel supplier certification requirements in 40 CFR 60.46c(e).

The permittee shall monitor fuel usage to meet the recordkeeping requirements of 40 CFR 60.48c(g).

Recordkeeping: The permittee shall comply with the recordkeeping requirements of 40 CFR 60.48c(c), (f) and (g) and 40 CFR 60.7(b) and (f) and maintain the records according to §60.48c(i) except when records are required to be maintained for a longer time period in accordance with Section B109.

1. Provide *Method(s) or other information or other facts used to determine the compliance status* in the "Methods:" row beneath each permit condition. 2. If you answered *No* to question 3, list *all* deviations in the *Deviations* section. For *all* Deviations that *produced* excess emissions, provide *only* **a)** the AQBCR EER Tracking Number. For *all* Deviations that *did not produce* excess emissions, provide **a)** The Unit ID, **b)** The Cause of and a Description of the Deviation, **c)** the Corrective Action, and **d)** the Start & End Dates of the deviation. Please indicate in **b)**, your *Description*, whether each deviation has been previously reported to NMED.	3. Was this facility *continuously* in compliance with *all* requirements of this condition during the reporting period?

Methods: Requirement: LANL purchases only fuel oil with ultra low sulfur content; fuel oil was not used during this certification period. RLUOB-BHW-4 has not been installed.

Monitoring: RLUOB-BHW-4 has not been installed. When installed, the requirements, monitoring, recordkeeping and reporting will be conducted in accordance with the requirements listed in the current permit.

Recordkeeping: RLUOB-BHW-4 has not been installed. When installed, the requirements, monitoring, recordkeeping and reporting will be conducted in accordance with the requirements listed in the current permit.

Reporting: RLUOB-BHW-4 has not been installed. When installed, the requirements, monitoring, recordkeeping and reporting will be conducted in accordance with the requirements listed in the current permit.

Deviations: Unit ID	Cause, Description of Deviation, and Corrective Action Taken or Tracking number	Start Date	End Date

A807 Other – External Combustion

E. Initial Compliance Testing (Units RLUOB-BHW-4)

Requirement: Initial compliance tests are required for boiler, Unit RLUOB-BHW-4. The tests shall be conducted for NOx and CO while burning natural gas fuel only. This condition applies only if boiler Unit RLUOB-BHW-4 is not an identical make and model to boiler units RLUOB-BHW-1 through -3. (NSR Permit 2195N-R2, Specific Condition 6.a., revised)

Monitoring: The permittee shall conduct EPA Method tests for CO and NOx within six (6) months of any new boiler start up. Method 19 may be used for determining stack flow rates. This requirement supersedes Condition B111.A(2). Initial compliance testing shall be conducted in accordance with Section B111.

Recordkeeping: The permittee shall maintain records in accordance with Section B109.

Reporting: The permittee shall report in accordance with Section B110 and Section B111.

☐ **Yes** ☐ **No**

☒ **N/A**

Methods: Requirement: Unit RLUOB-BHW-4 has not been installed. Once installed, monitoring, recordkeeping and reporting will be conducted in accordance with the requirements listed in the current permit.

Monitoring: Unit RLUOB-BHW-4 has not been installed. Once installed, monitoring, recordkeeping and reporting will be conducted in accordance with the requirements listed in the current permit.

Recordkeeping: Unit RLUOB-BHW-4 has not been installed. Once installed, monitoring, recordkeeping and reporting will be conducted in accordance with the requirements listed in the current permit.

Reporting: Unit RLUOB-BHW-4 has not been installed. Once installed, monitoring, recordkeeping and reporting will be conducted in accordance with the requirements listed in the current permit.

Deviations: Unit ID	Cause, Description of Deviation, and Corrective Action Taken or Tracking number	Start Date	End Date

A807 Other – External Combustion

1. Provide *Method(s) or other information or other facts used to determine the compliance status* in the "Methods:" row beneath each permit condition. 2. If you answered *No* to question 3, list *all* deviations in the *Deviations* section. For *all* Deviations that *produced* excess emissions, provide *only* **a)** the AQBCR EER Tracking Number. For *all* Deviations that *did not produce* excess emissions, provide **a)** The Unit ID, **b)** The Cause of and a Description of the Deviation, **c)** the Corrective Action, and **d)** the Start & End Dates of the deviation. Please indicate in **b)**, your *Description*, whether each deviation has been previously reported to NMED.	3. Was this facility *continuously* in compliance with *all* requirements of this condition during the reporting period?
F. Operational Inspection (Sources listed in Table 800.A) **Requirement**: Compliance with the allowable emission limits in Table 802.A shall be demonstrated by performing periodic inspections to ensure proper operations. **Monitoring**: The permittee shall conduct annual operational inspections to determine that the boilers are operating properly. The operational inspections shall include operational checks for indications of insufficient excess air, or too much excess combustion air. These operational checks shall include observation of common physical indications of improper combustion, including indications specified by the boiler manufacturer, and indications based on operational experience with these units. **Recordkeeping**: The permittee shall maintain records of operational inspections, describing the results of all operational inspections noting chronologically any adjustments needed to bring the boilers into compliance. The permittee shall maintain records in accordance with Section B109. **Reporting**: The permittee shall report in accordance with Section B110. Within ninety (90) days of permit issuance, the permittee shall submit for Department approval a procedure which the permittee will use to carry out the operational inspections. The permittee may at any time submit revisions for Department approval.	
Methods: Requirement: LANL conducts annual operational inspections and preventive maintenance on the permitted boilers listed in the current permit to ensure proper operations. Monitoring: LANL has on-site facility-wide annual boiler maintenance procedures for hotwater boilers and steam boilers in accordance with the recommended manufacturer's specifications. LANL's fireside-waterside procedures include annual operational inspections to ensure proper combustion. Annual operational inspections were performed in June 2021, September 2021, and October 2021 for all the permitted boilers. The boiler inspection reports are available on-site and will be furnished upon request. Recordkeeping: The annual inspections were performed in June 2021, September 2021, and October 2021. The records of operational inspections and preventive maintenance are maintained in the compliance folders and e-files stored on air quality servers. Reporting: LANL submitted two procedures that are used to carry out the operational inspections: "Preventive Maintenance Instruction (PMI) 403-A.006: Hot Water Boiler Annual Fireside/Waterside Inspection and Maintenance" for boilers at TA-53 and TA55 and "Maintenance Procedure UIDO-PROC-76-28-010-R0: TA-09/16 Steam Plants – Annual Boiler Waterside/Fireside Checklist" for boilers located at TA-16. The procedures were submitted to NMED AQB on May 14, 2015 (SBR20150006) within 90 days after permit P100-R2 issuance. Revisions were last made to PMI 403-A.006 on October 24, 2018 and to Maintenance Procedure UIDO-PROC-76-28-010-R0 on October 8, 2021.	☒ **Yes** ☐ **No** ☐ **N/A**

Deviations: Unit ID	Cause, Description of Deviation, and Corrective Action Taken or Tracking number	Start Date	End Date

EQUIPMENT SPECIFIC REQUIREMENTS **CHEMICAL USAGE** **A900 Regulated Sources – Chemical Usage** **A.** Table 900.A lists all of the process equipment authorized for this source category.	☒ **Yes** ☐ **No** ☐ **N/A**

1. Provide *Method(s) or other information or other facts used to determine the compliance status* in the "Methods:" row beneath each permit condition. 2. If you answered *No* to question 3, list *all* deviations in the *Deviations* section. For *all* Deviations that *produced* excess emissions, provide *only* **a)** the AQBCR EER Tracking Number. For *all* Deviations that *did not produce* excess emissions, provide **a)** The Unit ID, **b)** The Cause of and a Description of the Deviation, **c)** the Corrective Action, and **d)** the Start & End Dates of the deviation. Please indicate in **b)**, your *Description*, whether each deviation has been previously reported to NMED.				3. Was this facility *continuously* in compliance with *all* requirements of this condition during the reporting period?
Methods: No new process equipment was added and no changes were made to this source category during this certification period.				
Deviations: Unit ID	Cause, Description of Deviation, and Corrective Action Taken or Tracking number	Start Date	End Date	

A902 Emission Limits – Chemical Usage	
A. Table 902.A lists the emission units, and their allowable emission limits. (40 CFR 50; Paragraphs 1, 7, and 8 of 20.2.70.302.A NMAC, NSR Permit 2195N-R2).	☒ **Yes** ☐ **No** ☐ **N/A**
Methods: Emissions are calculated and reported on a six-month basis in accordance with permit condition A109.B. Comparison against the allowable emission limits is performed at each of these certification periods. Allowable emission limits were not exceeded during this certification period.	

Deviations: Unit ID	Cause, Description of Deviation, and Corrective Action Taken or Tracking number	Start Date	End Date

A903 Applicable Requirements – Chemical Usage	
A. The permittee shall comply with all applicable sections of the requirements listed in Table 903.A.	☒ **Yes** ☐ **No** ☐ **N/A**
Methods: Chemical use is tracked and emissions are calculated monthly to determine TAP emissions for RLUOB-CHEM. If TAP emissions are expected to exceed screening levels, an NSR permit revision would be requested.	

Deviations: Unit ID	Cause, Description of Deviation, and Corrective Action Taken or Tracking number	Start Date	End Date

A904 Operational Limitations – Chemical Usage

A. The Chemical Usage source category is authorized for continuous operation. No monitoring, recordkeeping, or reporting requirements are required to demonstrate compliance with continuous hours of operation.

A904 Operational Limitations – Chemical Usage	
B. For Unit RLUOB-CHEM, the permittee shall obtain a NSR permit revision prior to the use of any TAP that is expected to be emitted in excess of the stack-height-corrected screening levels at 20.2.72.502 NMAC. (NSR Permit 2195N-R2, Specific Condition 1.i, revised)	☒ **Yes** ☐ **No** ☐ **N/A**
Methods: Chemical use is tracked and emissions are calculated monthly to determine TAP emissions for RLUOB-CHEM. If TAP emissions are expected to exceed screening levels, an NSR permit revision would be requested.	

Deviations: Unit ID	Cause, Description of Deviation, and Corrective Action Taken or Tracking number	Start Date	End Date

A907 Other – Chemical Usage	
A. Emission calculations (Unit LANL-FW-CHEM) **Requirement**: The permittee shall comply with the facility-wide VOC and HAP emission limits at Table 106.B. **Monitoring**: The permittee shall monitor facility-wide chemical purchasing and site location using an electronic chemical tracking system. The quantity of chemicals that are vented to the atmosphere shall be estimated on a semi-annual basis, and categorized as VOC, HAP, or a combination of these	☒ **Yes** ☐ **No** ☐ **N/A**

1. Provide *Method(s) or other information or other facts used to determine the compliance status* in the "Methods:" row beneath each permit condition. 2. If you answered *No* to question 3, list *all* deviations in the *Deviations* section. For *all* Deviations that *produced* excess emissions, provide *only* **a)** the AQBCR EER Tracking Number. For *all* Deviations that *did not produce* excess emissions, provide **a)** The Unit ID, **b)** The Cause of and a Description of the Deviation, **c)** the Corrective Action, and **d)** the Start & End Dates of the deviation. Please indicate in **b)**, your *Description*, whether each deviation has been previously reported to NMED.	3. Was this facility *continuously* in compliance with *all* requirements of this condition during the reporting period?

categories.

Recordkeeping: The permittee shall record the quantity of total VOC emitted and the quantity of each individual and total HAPs on a semi-annual basis. These records shall be maintained in accordance with Section B109.

Reporting: The permittee shall submit reports described in Section A109 and in accordance with Section B110. With respect to individual HAPs, reports shall include any HAP emitted in a quantity greater than 0.5 tons per year.

Methods: Requirement: Facility-wide emissions did not exceed the VOC or HAP emission limits in Table 106.B.

Monitoring: Facility-wide chemical purchases are monitored using LANL's electronic chemical tracking system. The chemical purchase information is used to calculate emissions. Chemical emission information is submitted to NMED every six months in accordance with permit condition A109.B.

Recordkeeping: Records of facility-wide VOC and HAPs emissions are submitted with the Semi-Annual Emissions Report and the records are maintained at the site.

Reporting: Facility-wide VOC and HAPs emissions are calculated, recorded, and reported on a six-month basis in accordance with permit conditions A109.B, B109, and B110. The Semi-Annual Emissions Report includes individual HAPs emitted in a quantity greater than 0.5 tons per year. The Semi-Annual Emissions Report for July 1 - December 31, 2020, was submitted on March 29, 2021 (SBR20210003). The Semi-Annual Emissions Report for January 1 - June 30, 2021, was submitted on September 22, 2021 (SBR20210005), both within 90 days of the end of the reporting period.

Deviations: Unit ID	Cause, Description of Deviation, and Corrective Action Taken or Tracking number	Start Date	End Date

A907 Other – Chemical Usage

B. Emission calculations (Unit RLUOB-CHEM)

Requirement: The permittee shall comply with the source-specific VOC emission limit at Table 902.A and the facility-wide VOC and HAP emission limits at Table 106.B. (NSR Permit 2195N-R2, Specific Condition 2.a., revised)

Monitoring: The permittee shall monitor chemical purchasing for the RLUOB-CHEM facility using an electronic chemical tracking system. The quantity of chemicals that are vented to the atmosphere shall be estimated on a monthly basis, and categorized as VOC, HAP, TAP, or a combination of these categories. (NSR Permit 2195N-R2, Specific Condition 4.c., revised)

Recordkeeping: The permittee shall record the quantity of total VOC and TAP, each individual HAP,and the total HAPs emitted on a monthly rolling, 12-month total basis. These records shall be maintained in accordance with Section B109. (NSR Permit 2195N-R2, Specific Condition 4.c., revised)

Reporting: The permittee shall submit reports described in Section A109 and in accordance with Section B110. With respect to individual HAPs, reports shall include any HAP emitted in a quantity greater than 0.5 tons per year.

☒ **Yes** ☐ **No**

☐ **N/A**

1. Provide *Method(s) or other information or other facts used to determine the compliance status* in the "Methods:" row beneath each permit condition. 2. If you answered *No* to question 3, list *all* deviations in the *Deviations* section. For *all* Deviations that *produced* excess emissions, provide *only* **a)** the AQBCR EER Tracking Number. For *all* Deviations that *did not produce* excess emissions, provide **a)** The Unit ID, **b)** The Cause of and a Description of the Deviation, **c)** the Corrective Action, and **d)** the Start & End Dates of the deviation. Please indicate in **b)**, your *Description*, whether each deviation has been previously reported to NMED.	3. Was this facility *continuously* in compliance with *all* requirements of this condition during the reporting period?

Methods: Requirement: Source specific VOC and facility-wide VOC and HAP emissions are in compliance with emission limits set in Tables 902.A and 106.B in NSR Permit 2195N-R2.

Monitoring: Chemical purchasing for the RLUOB-CHEM facility are monitored using LANL's electronic chemical tracking system. The quantities of chemicals that are vented to the atmosphere are estimated on a monthly basis and are categorized as VOC, HAP, TAP, or a combination of these categories.

Recordkeeping: The quantity of total VOC and TAP, individual HAP, and the total HAPs emitted are recorded on a monthly rolling, 12–month total basis. Records are maintained in accordance with Section B109.

Reporting: Emissions and monitoring reports are submitted on a six-month basis and compliance certification on an annual basis in accordance with permit conditions A109 and B110. The Semi-Annual Emission Report includes individual HAPs emitted in a quantity greater than 0.5 tons per year. For more information, see comments in Section A605 of this report.

Deviations: Unit ID	Cause, Description of Deviation, and Corrective Action Taken or Tracking number	Start Date	End Date

EQUIPMENT SPECIFIC REQUIREMENTS

DEGREASERS

A1000 Regulated Sources – Degreasers

A. Table 1000.A lists all of the process equipment authorized for this source category.

☒ **Yes** ☐ **No** ☐ **N/A**

Methods: No new process equipment was added to this source category during this certification period.

Deviations: Unit ID	Cause, Description of Deviation, and Corrective Action Taken or Tracking number	Start Date	End Date

A1002 Emission Limits –Degreasers

A. Table 1002.A lists the emission units, and their allowable emission limits. (40 CFR 50; Paragraphs 1, 7, and 8 of 20.2.70.302.A NMAC).

☒ **Yes** ☐ **No** ☐ **N/A**

Methods: Emissions are calculated and reported on a six-month basis in accordance with permit condition A109.B. Comparison against the allowable emission limits is performed at each of these reporting periods. Allowable emission limits were not exceeded during this certification period.

Deviations: Unit ID	Cause, Description of Deviation, and Corrective Action Taken or Tracking number	Start Date	End Date

A1003 Applicable Requirements – Degreasers

A. The permittee shall comply with all applicable sections of the requirements listed in Table 1003.A.

☒ **Yes** ☐ **No** ☐ **N/A**

Methods: The LANL degreaser operation met all applicable requirements of 40 CFR Part 63, Subpart T during this certification period.

Deviations: Unit ID	Cause, Description of Deviation, and Corrective Action Taken or Tracking number	Start Date	End Date

1. Provide *Method(s) or other information or other facts used to determine the compliance status* in the "Methods:" row beneath each permit condition. 2. If you answered *No* to question 3, list *all* deviations in the *Deviations* section. For *all* Deviations that *produced* excess emissions, provide *only* **a)** the AQBCR EER Tracking Number. For *all* Deviations that *did not produce* excess emissions, provide **a)** The Unit ID, **b)** The Cause of and a Description of the Deviation, **c)** the Corrective Action, and **d)** the Start & End Dates of the deviation. Please indicate in **b)**, your *Description*, whether each deviation has been previously reported to NMED.	3. Was this facility *continuously* in compliance with *all* requirements of this condition during the reporting period?

A1004 Operational Limitations – Degreasers

A. The Degreasers source category is authorized for continuous operation. No monitoring, recordkeeping, or reporting requirements are required to demonstrate compliance with continuous hours of operation.

A1007 Other – Degreasers

A. Operational Requirements (Degreasers)

Requirement: The permittee shall comply with the applicable requirements according to 40 CFR 63, Subpart T, including, but not limited to:

1) Ensure the degreaser is closed with a tight fitting cover whenever not in use, and
2) Maintain a freeboard ratio of 0.75 or greater, and
3) Collect and store all waste solvent and wipe rags in closed containers, and
4) Perform flushing within the freeboard area only, and
5) Allow cleaned parts to drip for 15 seconds or until dripping stops, and
6) Do not exceed the fill line on the solvent level, and
7) Wipe up spills immediately, and
8) Do not create observable splashing with agitation device, and
9) Ensure that the degreaser is not exsposed to drafts greater than 40 meters/min, and
10) Do not clean sponges, fabric, wood, or paper.

☒ **Yes** ☐ **No**

☐ **N/A**

Monitoring: The permittee shall monitor and record the amount of solvent added to the degreaser.

Recordkeeping: The permittee shall:

1) Calculate the actual emissions rate (pounds/month) of VOC and HAPs based on the quantity of solvent lost to evaporation on a monthly basis.
2) Calculate the semi-annual emissions rate (tons/year) for this source category and add to the facility-wide emission rates in Table 106.B.
3) Maintain records of the degreaser solvent content and quantity added and work practice checklists.
4) The permittee shall maintain records in accordance with Section B109.

Reporting: The permittee shall submit reports described in Section A109 and in accordance with Section B110.

1. Provide *Method(s) or other information or other facts used to determine the compliance status* in the "Methods:" row beneath each permit condition. 2. If you answered *No* to question 3, list *all* deviations in the *Deviations* section. For *all* Deviations that *produced* excess emissions, provide *only* **a)** the AQBCR EER Tracking Number. For *all* Deviations that *did not produce* excess emissions, provide **a)** The Unit ID, **b)** The Cause of and a Description of the Deviation, **c)** the Corrective Action, and **d)** the Start & End Dates of the deviation. Please indicate in **b)**, your *Description*, whether each deviation has been previously reported to NMED.	3. Was this facility *continuously* in compliance with *all* requirements of this condition during the reporting period?

Methods: Requirement: 1) The degreaser is kept closed with a tight fitting cover when it is not being used.

2) A freeboard ratio of 0.75 or greater is maintained.

3) All waste solvent and solvent contaminated wipe rags are collected and stored in closed containers.

4) Flushing operations are performed only within the freeboard area.

5) Cleaned parts are allowed to drip for 15 seconds or until dripping stops.

6) The fill line has not been exceeded.

7) Spills are wiped up immediately.

8) Administrative controls are in place to prevent observable splashing with an agitation device.

9) The degreaser is located in a glove box with a set ventilation flow rate. Exhaust flows do not exceed 40 meters/min.

10) Sponges, fabric, wood, or paper are not cleaned in the degreaser.

Monitoring: A Degreaser Recordkeeping database is used to track the amount of degreaser solvent added, removed, and lost.

Recordkeeping: A Degreaser Recordkeeping database is used to track the amount of degreaser solvent added, removed, and lost. This system is used to calculate emissions.

1) The actual emission rate (pounds/month) of VOC and HAPs is automatically calculated by the database when data is entered on a monthly basis.

2) The six-month emissions (tons/year) are also calculated by the database. These emissions are included in the facility-wide totals.

3) Checklists for work practice standards have been completed for this certification period. Records of solvent content and quantity added are maintained on-site.

4) Records for this source category are maintained in accordance with Section B109.

Reporting: Emissions and monitoring reports are submitted on a six-month basis and compliance certification on an annual basis in accordance with permit conditions A109 and B110. For more information, see comments in Section A605 of this report.

Deviations: Unit ID	Cause, Description of Deviation, and Corrective Action Taken or Tracking number	Start Date	End Date

EQUIPMENT SPECIFIC REQUIREMENTS

INTERNAL COMBUSTION

A1100 Regulated Sources – Internal Combustion

A. Table 1100.A lists all of the process equipment authorized for this source category.

☒ **Yes** ☐ **No**

☐ **N/A**

1. Provide *Method(s) or other information or other facts used to determine the compliance status* in the "Methods:" row beneath each permit condition. 2. If you answered *No* to question 3, list *all* deviations in the *Deviations* section. For *all* Deviations that *produced* excess emissions, provide *only* **a)** the AQBCR EER Tracking Number. For *all* Deviations that *did not produce* excess emissions, provide **a)** The Unit ID, **b)** The Cause of and a Description of the Deviation, **c)** the Corrective Action, and **d)** the Start & End Dates of the deviation. Please indicate in **b)**, your *Description*, whether each deviation has been previously reported to NMED.				3. Was this facility *continuously* in compliance with *all* requirements of this condition during the reporting period?
Methods: Table 1100.A. lists the current internal combustion equipment authorized for this source category.				
Deviations: Unit ID	Cause, Description of Deviation, and Corrective Action Taken or Tracking number	Start Date	End Date	

A1102 Emission Limits – Internal Combustion **A.** Table 1102.A lists the emission units, and their allowable emission limits. (40 CFR 50; Paragraphs 1, 7, and 8 of 20.2.70.302.A NMAC; NSR permit 2195F-R4 and 2195P)				☒ **Yes** ☐ **No** ☐ **N/A**
Methods: Emissions are calculated and reported on a six-month basis in accordance with permit condition A109.B. Comparison against the allowable emission limits is performed at each of these reporting periods. Allowable emission limits were not exceeded during this certification period.				
Deviations: Unit ID	Cause, Description of Deviation, and Corrective Action Taken or Tracking number	Start Date	End Date	

A1103 Applicable Requirements – Internal Combustion **A.** The permittee shall comply with all applicable sections of the requirements listed in Table 1103.A.				☒ **Yes** ☐ **No** ☐ **N/A**
Methods: LANL is in compliance with the applicable requirements for permitted internal combustion units.				
Deviations: Unit ID	Cause, Description of Deviation, and Corrective Action Taken or Tracking number	Start Date	End Date	

A1104 Operational Limitations – Internal Combustion

A. Hours of Operation and Emission Limits for Unit TA-33-G-1P

Requirements:

1) Unit TA-33-G-1P is limited to eight (8) hours of daily operation at full capacity. Operation shall occur between the hours of 7:00 AM and 5:00 PM. (NSR Permit 2195F-R4, Condition A1104.A)

2) Unit TA-33-G-1P is limited to the emissions limits stated in Table 1102.A. (NSR Permit 2195F-R4, Condition A1104.A)

Monitoring: The permittee shall monitor the time(s) of operation each day, and the daily and monthly rolling 12-month total hours of operation for Unit TA-33-G-1P using a non-resettable hour meter. Hours that do not represent hours the unit is operated at the TA-33 site may be monitored separately for subsequent subtraction from the daily and monthly rolling 12-month totals

Recordkeeping: The permittee shall maintain the following records and in accordance with Section B109:

1) The permittee shall keep records of the time(s) of operation each day, and the daily, monthly, and the monthly rolling 12-month total hours of operation of the genset listed above, as indicated on the non-resettable hour meter. The permittee may record and subtract hours of operation that do not represent operating hours at the TA-33 site.

2) The permittee shall calculate the annual emissions of all criteria and hazardous air pollutants from Unit TA-33-G-1P. The permittee may subtract emissions that are not the result of operations at TA-33.

☒ **Yes** ☐ **No**
☐ **N/A**

1. Provide *Method(s) or other information or other facts used to determine the compliance status* in the "Methods:" row beneath each permit condition. 2. If you answered *No* to question 3, list *all* deviations in the *Deviations* section. For *all* Deviations that *produced* excess emissions, provide *only* **a)** the AQBCR EER Tracking Number. For *all* Deviations that *did not produce* excess emissions, provide **a)** The Unit ID, **b)** The Cause of and a Description of the Deviation, **c)** the Corrective Action, and **d)** the Start & End Dates of the deviation. Please indicate in **b)**, your *Description*, whether each deviation has been previously reported to NMED.	3. Was this facility *continuously* in compliance with *all* requirements of this condition during the reporting period?

Reporting: The permittee shall submit reports in accordance with Section B110.

Methods: Requirement: Unit TA-33-G-1P operated for 19.1 hours of maintenance during this certification period. Emissions are lower than the limits stated in Table 1102.A. in NSR permit 2195F-R4.

Monitoring: The times of operations are monitored and the generator is equipped with a non-resettable hour meter. The purpose of equipment use at TA-33 and elsewhere are identified in a log sheet.

Recordkeeping: 1) A log book is located in the trailer that contains the unit. The log book includes hours of operation recorded daily when the equipment operates. The monthly rolling 12-month total hours of operation are calculated in a spreadsheet. Operations at areas outside TA-33 are recorded.

2) The annual emissions of criteria and HAPs are calculated based on the hours of operation.

Reporting: Reports are submitted as required by permit conditions in accordance with Section B110.

Deviations: Unit ID	Cause, Description of Deviation, and Corrective Action Taken or Tracking number	Start Date	End Date

A1104 Operational Limitations – Internal Combustion

B. Hours of Operation and Emission Limits for Units TA-33-G-2 through -4

Requirements:

1) Units TA-33-G-2 through -4 are authorized to operate 500 hours per generator per calendar year. (NSR Permit 2195P, Specific Condition 1.b.)

2) Units TA-33-G-2 through -4 shall each be certified to be in compliance with applicable non-road emission standards in 40 CFR 89. (NSR Permit 2195P, Specific Condition 1.c.)

Monitoring: The permittee shall monitor the total hours of operation for each genset, Units TA-33-G-2 through -4, using a non-resettable hour meter.

Recordkeeping: The permittee shall:

1) Record the total hours operation of the gensets listed above, as indicated on the non-resettable hour meter. (NSR Permit 2195P, Specific Condition 4.a., revised)

2) Calculate and record the semi-annual emissions of criteria and hazardous air pollutants from each genset, Units TA-33-G-2 through -4.

3) Maintain a copy of the engine certification to the applicable non road emission standards in 40 CFR 89. (NSR Permit 2195P, Specific Condition 4.c.)

Reporting: The permittee shall submit reports described in Section A109 and in accordance with Section B110.

☒ **Yes** ☐ **No**

☐ **N/A**

1. Provide *Method(s) or other information or other facts used to determine the compliance status* in the "Methods:" row beneath each permit condition. 2. If you answered *No* to question 3, list *all* deviations in the *Deviations* section. For *all* Deviations that *produced* excess emissions, provide *only* **a)** the AQBCR EER Tracking Number. For *all* Deviations that *did not produce* excess emissions, provide **a)** The Unit ID, **b)** The Cause of and a Description of the Deviation, **c)** the Corrective Action, and **d)** the Start & End Dates of the deviation. Please indicate in **b)**, your *Description*, whether each deviation has been previously reported to NMED.	3. Was this facility *continuously* in compliance with *all* requirements of this condition during the reporting period?

Methods: Requirement/Monitoring: Compliance with the hourly operational limitations and emission requirements for TA-33-G-2 through -4 are described below:

1) The hour meter readings are collected twice a year to verify that the hour limit is not being approached. The operating hour limits for these units were not exceeded during this certification period.

2) Manufacturer's certificates of compliance with applicable non-road emission standards are maintained on-site.

The hour meters on these units are non-resettable.

Recordkeeping:

1) Equipment operating hours are recorded.

2) The emissions of regulated pollutants from Units TA-33-G-2, TA-33-G-3 and TA-33-G-4 are calculated and recorded on a six-month basis.

3) Certificates of compliance with applicable non-road emission standards are maintained on-site.

Reporting: Emissions and monitoring reports are submitted on a six-month basis and compliance certification is submitted on an annual basis in accordance with permit conditions A109 and B110. For more information, see comments in Section A605 of this report.

Deviations: Unit ID	Cause, Description of Deviation, and Corrective Action Taken or Tracking number	Start Date	End Date

A1105 Fuel Sulfur Requirements – Internal Combustion

A. Fuel Sulfur Requirement for Unit TA-33-G-1P

Requirement: Unit TA-33-G-1P while in use at TA-33 shall combust only diesel fuel containing no more than 500 ppmw total sulfur.

Monitoring: None.

Recordkeeping: The permittee shall demonstrate compliance with the limit on total fuel sulfur content by maintaining records of a current, valid purchase contract, tariff sheet or transportation contract for the fuel, or fuel analysis, specifying the fuel grade and certification or allowable sulfur limit. If fuel analysis is used, the analysis shall not be older than one year. Alternatively, compliance may be demonstrated by keeping a receipt or invoice from a commercial fuel supplier with each fuel delivery, which shall include the delivery date, the fuel type delivered, and amount of fuel delivered, and the maximum sulfur content of the fuel.

Reporting: The permittee shall submit reports described in Section A109 and in accordance with Section B110.

☒ **Yes** ☐ **No**

☐ **N/A**

1. Provide *Method(s) or other information or other facts used to determine the compliance status* in the "Methods:" row beneath each permit condition. 2. If you answered *No* to question 3, list *all* deviations in the *Deviations* section. For *all* Deviations that *produced* excess emissions, provide *only* **a)** the AQBCR EER Tracking Number. For *all* Deviations that *did not produce* excess emissions, provide **a)** The Unit ID, **b)** The Cause of and a Description of the Deviation, **c)** the Corrective Action, and **d)** the Start & End Dates of the deviation. Please indicate in **b)**, your *Description*, whether each deviation has been previously reported to NMED.	3. Was this facility *continuously* in compliance with *all* requirements of this condition during the reporting period?
Methods: Requirement: Only Ultra Low Sulfur Diesel (ULSD) is used at the facility and it contains no more than 15 ppm sulfur. Sulfur content is documented in fuel manifests and bill of ladings. Monitoring: None Recordkeeping: Only ULSD fuel containing no more than 15 ppm sulfur is used in this unit. Copies of the fuel manifests and bill of ladings are maintained in electronic files. Reporting: Emissions and monitoring reports are submitted on a six-month basis and compliance certification is submitted on an annual basis in accordance with permit conditions A109 and B110. For more information, see comments in Section A605 of this report.	

Deviations: Unit ID	Cause, Description of Deviation, and Corrective Action Taken or Tracking number	Start Date	End Date

A1106 20.2.61 NMAC Opacity – Internal Combustion

A. CI-RICE - TA-33-G-1P, TA-33-G-2, TA-33-G-3, TA-33-G-4, RLUOB-GEN-1, RLUOB-GEN-2, RLUOB-GEN-3, TA-48-GEN-1, TA-55-GEN-1 TA-55-GEN-2 and TA-55-GEN-3

Requirement: Visible emissions from the stacks of the above listed sources shall not equal or exceed an opacity of 20 percent.

Monitoring: During steady state operation, opacity shall be measured over a 10-minute period in accordance with the procedures at 40 CFR 60, Appendix A, Method 9 as required by 20.2.61.114 NMAC. Opacity measurements shall be conducted on a quarterly basis per calendar year as qualified by the Section B108.D monitoring provisions. This requirement excludes Insignificant and Trivial Activities.

Recordkeeping: The permittee shall maintain records of all Method 9 observations, and in accordance with Section B109.

Reporting: The permittee shall report date, time, and results of all Method 9 observations. The permittee shall submit reports described in Section A109 and in accordance with Section B110.

☒ **Yes** ☐ **No**

☐ **N/A**

1. Provide *Method(s) or other information or other facts used to determine the compliance status* in the "Methods:" row beneath each permit condition. 2. If you answered *No* to question 3, list *all* deviations in the *Deviations* section. For *all* Deviations that *produced* excess emissions, provide *only* **a)** the AQBCR EER Tracking Number. For *all* Deviations that *did not produce* excess emissions, provide **a)** The Unit ID, **b)** The Cause of and a Description of the Deviation, **c)** the Corrective Action, and **d)** the Start & End Dates of the deviation. Please indicate in **b)**, your *Description*, whether each deviation has been previously reported to NMED.	3. Was this facility *continuously* in compliance with *all* requirements of this condition during the reporting period?

Methods: Requirement: Opacity measurements were required for five generators in this certification period, no visible emissions were observed to exceed 20% opacity in listed sources.

Monitoring: Opacity measurements were required for five generators in this certification period. Section B108.D(2) of the permit allows for reduced frequency of opacity monitoring, if the unit operates 25% (547.5 hours in a quarter) or less of a monitoring period (calendar quarter). After two successive periods without monitoring, monitoring is required during the next period, unless the unit has operated less than 10% (219 hours in a quarter) of the monitoring period. If the unit runs less than 10% that period is not considered as one of the two successive periods. No other applicable CI-RICE units operated more than 25% for two successive monitoring periods during this certification period, therefore no monitoring was required other than the readings required for the five generators.

Recordkeeping: Records are maintained in accordance with Section B109.

Reporting: A standard form is used for all opacity measurements. The form includes the date, time, and results of the Method 9 observations. Emissions and monitoring reports are submitted on a six-month basis and compliance certification on an annual basis in accordance with permit conditions A109 and B110. For more information, see comments in Section A605 of this report.

Deviations: Unit ID	Cause, Description of Deviation, and Corrective Action Taken or Tracking number	Start Date	End Date

A1107 Other – Internal Combustion

A. 40 CFR 60, Subpart IIII (Emergency Generators Units RLUOB-GEN-1 through -3)

Requirement: The units are subject to 40 CFR 60, Subpart IIII and the permittee shall comply with the applicable emissions standards and fuel requirements in §60.4205(a), §60.4206 and §60.4207(b) and Table 1102.B. In addition the permittee shall follow the compliance requirements stated in §60.4211(a, b, and f) and the general provisions of 40 CFR 60 Subpart A as required in §60.4218.

☒ **Yes** ☐ **No**

☐ **N/A**

Monitoring: None

Recordkeeping: The permittee shall maintain records in accordance with Section B109.

Reporting: The permittee shall comply with all applicable reporting requirements of 40 CFR 60, Subpart A as required in §60.4218 and in accordance with Section B110.

1. Provide *Method(s) or other information or other facts used to determine the compliance status* in the "Methods:" row beneath each permit condition. 2. If you answered *No* to question 3, list *all* deviations in the *Deviations* section. For *all* Deviations that *produced* excess emissions, provide *only* **a)** the AQBCR EER Tracking Number. For *all* Deviations that *did not produce* excess emissions, provide **a)** The Unit ID, **b)** The Cause of and a Description of the Deviation, **c)** the Corrective Action, and **d)** the Start & End Dates of the deviation. Please indicate in **b)**, your *Description*, whether each deviation has been previously reported to NMED.	3. Was this facility *continuously* in compliance with *all* requirements of this condition during the reporting period?

Methods: Requirement: The units are in compliance with the applicable emissions standards and fuel requirements in 40 CFR 60, Subpart IIII in §60.4205(a), §60.4206 and §60.4207(b) and Table 1102.B. Diesel sulfur requirements of 15 ppm are met by fuel manifests and bill of ladings documenting ULSD purchases. §60.4211 (a) (b) and (f) - Manufacturer's certifications for nonroad engines are on-site; non-emergency maintenance checks and readiness testing of such units is limited to 100 hours per year per §60.4211(f)(3).

Monitoring: N/A

Recordkeeping: Hours of non-emergency and emergency operation are recorded at the facility during generator operation. The units subject to this condition operated less than 100 hours to date on non-emergency maintenance and readiness checks in accordance with condition in §60.4211(f)(3).

Reporting: Hours of operations are reported in accordance with Section B110.

Deviations: Unit ID	Cause, Description of Deviation, and Corrective Action Taken or Tracking number	Start Date	End Date

A1107 Other – Internal Combustion

B. 40 CFR 60, Subpart IIII (Emergency Generators Unit TA-48-GEN-1, TA-55-GEN-1 TA-55-GEN-2 and TA-55-GEN-3)

Requirement: The units are subject to 40 CFR 60, Subpart IIII and the permittee shall comply with the applicable emissions standards and fuel requirements in §60.4205(b), §60.4202(a)(2), §60.4206 and §60.4207(b) and Table 1102.B. In addition, the permittee shall follow the compliance requirements stated in §60.4211(a, c and f) and the general provisions of 40 CFR 60 Subpart A as required in §60.4218.

Monitoring: None

Recordkeeping: The permittee shall maintain records in accordance with Section B109.

Reporting: The permittee shall comply with all applicable reporting requirements of 40 CFR 60, Subpart A as required in §60.4218 and in accordance with Section B110.

☒ **Yes** ☐ **No**

☐ **N/A**

Methods: Requirement: The units are in compliance with the applicable emissions standards and fuel requirements in 40 CFR 60, Subpart IIII in §60.4205(b), §60.4202(a)(2), §60.4206 and §60.4207(b) and Table 1102.B.

Diesel sulfur requirements of 15 ppm are met by fuel manifests and bill of ladings documenting ULSD purchases

§60.4211 (a) (c) and (f) - Manufacturer's certifications for non-road engines are on-site to demonstrate compliance with standards; non-emergency maintenance checks and readiness testing of such units are limited to 100 hours per year per §60.4211(f)(3).

Monitoring: None

Recordkeeping: Hours of non-emergency and emergency operation are recorded at the facility during generator operation. The units subject to this condition operated less than 100 hours to date on non-emergency maintenance and readiness checks.

Reporting: Hours of operations are reported in accordance with Section B110.

Deviations: Unit ID	Cause, Description of Deviation, and Corrective Action Taken or Tracking number	Start Date	End Date

1. Provide *Method(s) or other information or other facts used to determine the compliance status* in the "Methods:" row beneath each permit condition. 2. If you answered *No* to question 3, list *all* deviations in the *Deviations* section. For *all* Deviations that *produced* excess emissions, provide *only* **a)** the AQBCR EER Tracking Number. For *all* Deviations that *did not produce* excess emissions, provide **a)** The Unit ID, **b)** The Cause of and a Description of the Deviation, **c)** the Corrective Action, and **d)** the Start & End Dates of the deviation. Please indicate in **b)**, your *Description*, whether each deviation has been previously reported to NMED.	3. Was this facility *continuously* in compliance with *all* requirements of this condition during the reporting period?

EQUIPMENT SPECIFIC REQUIREMENTS

DATA DISINTEGRATOR

A1200 Regulated Sources – Data Disintegrator

A. Table 1200.A lists all of the process equipment authorized for this source category.

☒ **Yes** ☐ **No** ☐ **N/A**

Methods: No new process equipment was added and no changes were made to this source category during this certification period.

Deviations: Unit ID	Cause, Description of Deviation, and Corrective Action Taken or Tracking number	Start Date	End Date

A1201 Control Equipment – Data Disintegrator

A. Table 1201.A lists all of the pollution control equipment required for the applicable regulated equipment in this source category. Each emission point is identified by the same number that was assigned to it in the permit application.

☒ **Yes** ☐ **No** ☐ **N/A**

Methods: No new pollution control equipment was added and no changes were made to this source category during this certification period.

Deviations: Unit ID	Cause, Description of Deviation, and Corrective Action Taken or Tracking number	Start Date	End Date

A1202 Emission Limits – Data Disintegrator

A. Table 1202.A lists the emission units, and their allowable emission limits. (40 CFR 50; Paragraphs 1, 7, and 8 of 20.2.70.302.A NMAC; NSR Permit 2195H).

☒ **Yes** ☐ **No** ☐ **N/A**

Methods: Emissions are calculated and reported on a six-month basis in accordance with permit condition A109.B. Comparison against the allowable emission limits is performed at each of these reporting periods. Allowable emission limits were not exceeded during this certification period.

Deviations: Unit ID	Cause, Description of Deviation, and Corrective Action Taken or Tracking number	Start Date	End Date

A1203 Applicable Requirements – Data Disintegrator

A. The permittee shall comply with all applicable sections of the requirements listed in Table 1203.A.

☒ **Yes** ☐ **No** ☐ **N/A**

Methods: LANL data disintegrator operations meet the requirements of NSR Permit No. 2195H.

Deviations: Unit ID	Cause, Description of Deviation, and Corrective Action Taken or Tracking number	Start Date	End Date

A1204 Operational Limitations – Data Disintegrator

A. Operational Throughput Limitation (Unit Data Disintegrator)

☒ **Yes** ☐ **No** ☐ **N/A**

Requirement: The Unit Data Disintegrator is limited processing no more than 25,000 boxes or 565 tons per year media. To avoid Compliance Assurance Monitoring (CAM) requirements under 40 CFR 64, the Data Disintegrator shall limit uncontrolled potential PM emissions by limiting media processing no more than 25,000 boxes or 565 tons per year.

1. Provide *Method(s) or other information or other facts used to determine the compliance status* in the "Methods:" row beneath each permit condition. 2. If you answered *No* to question 3, list *all* deviations in the *Deviations* section. For *all* Deviations that *produced* excess emissions, provide *only* **a)** the AQBCR EER Tracking Number. For *all* Deviations that *did not produce* excess emissions, provide **a)** The Unit ID, **b)** The Cause of and a Description of the Deviation, **c)** the Corrective Action, and **d)** the Start & End Dates of the deviation. Please indicate in **b)**, your *Description*, whether each deviation has been previously reported to NMED.				3. Was this facility *continuously* in compliance with *all* requirements of this condition during the reporting period?
Monitoring: The permittee shall perform the monitoring required in Condition A1207.A. **Recordkeeping**: The permittee shall perform the recordkeeping required in Condition A1207.A. **Reporting**: The permittee shall perform the reporting required in Condition A1207.A.				
Methods: Requirement: A log is kept to ensure that no more than 25,000 boxes or 565 tons per year of media are processed. Monitoring: Addressed in Condition A1207.A. Monitoring. Recordkeeping: Addressed in Condition A1207.A. Recordkeeping. Reporting: Addressed in Condition A1207.A. Reporting.				
Deviations: Unit ID	Cause, Description of Deviation, and Corrective Action Taken or Tracking number	Start Date	End Date	

A1207 Other – Data Disintegrator

A. Emission calculations (Data Disintegrator)

Requirement: The permittee shall calculate Data Disintegrator emissions based on the records of the number of boxes of media that are destroyed.

Monitoring: The permittee shall monitor the quantity of media destroyed on a monthly basis. The total weight shall be based on a previously determined average box weight. This average weight determination shall be maintained as part of the records for this facility.

Recordkeeping: The permittee shall calculate the actual emissions rate (tons per reporting period) for the emission units listed in Table 1200.A on a semi-annual basis. The emission rate in tons per year shall be calculated by summing the emissions from the previous reporting period with the current period. Records shall be maintained in accordance with Section B109.

Reporting: The permittee shall submit reports described in Section A109 and in accordance with Section B110.

☒ **Yes** ☐ **No**

☐ **N/A**

Methods: Requirement: A log is kept to record the number of boxes of media destroyed monthly and is used to calculate emissions on a six-month basis.

Monitoring: An operations log is kept to monitor the number of boxes of media that are destroyed each month. The average box weight has been determined and is maintained as part of the facility records.

Recordkeeping: The actual emissions rate is calculated for the emission unit on a six-month basis and is included in the Semi-Annual Emissions Report. These records are maintained on-site. The emission rate in tons per year is calculated by summing the emissions from the previous reporting period with the current period. The emissions are compared to the allowable emissions for the unit. Records are maintained in accordance with Section B109.

Reporting: Emissions and monitoring reports are submitted on a six-month basis and compliance certification submitted on an annual basis in accordance with permit conditions A109 and B110. For more information, see comments in Section A605 of this report.

Deviations: Unit ID	Cause, Description of Deviation, and Corrective Action Taken or Tracking number	Start Date	End Date

1. Provide *Method(s) or other information or other facts used to determine the compliance status* in the "Methods:" row beneath each permit condition. 2. If you answered *No* to question 3, list *all* deviations in the *Deviations* section. For *all* Deviations that *produced* excess emissions, provide *only* **a)** the AQBCR EER Tracking Number. For *all* Deviations that *did not produce* excess emissions, provide **a)** The Unit ID, **b)** The Cause of and a Description of the Deviation, **c)** the Corrective Action, and **d)** the Start & End Dates of the deviation. Please indicate in **b)**, your *Description*, whether each deviation has been previously reported to NMED.	3. Was this facility *continuously* in compliance with *all* requirements of this condition during the reporting period?

A1207 Other – Data Disintegrator

B. Cyclone/Cloth Tube Filters (Data Disintegrator)

Requirement: The permittee shall perform regular maintenance and repair on the cyclone and cloth tube filter(s) per manufacturer's recommendations. (NSR Permit 2195H, Specific Condition 1.d.)

Monitoring: N/A

Recordkeeping: The permittee shall maintain adequate records on site to demonstrate compliance with manufacturer's recommended repair and maintenance schedules for the cyclone and the cloth tube filter(s). (NSR Permit 2195H, Specific Condition 4.a.) Records shall be maintained in accordance with Section B109.

Reporting: The permittee shall submit reports described in Section A109 and in accordance with Section B110.

☒ **Yes** ☐ **No** ☐ **N/A**

Methods: Requirement: Preventive maintenance and repair are performed on the data disintegrator cyclone and cloth tube filter(s) following manufacturer's recommendations. Preventative maintenance was performed in October of 2021.

Deviations: Unit ID	Cause, Description of Deviation, and Corrective Action Taken or Tracking number	Start Date	End Date

A1207 Other – Data Disintegrator

C. Compliance Testing (Data Disintegrator)

Requirement: If upon notification by the Department, compliance testing is required, it shall be conducted in accordance with EPA Reference Methods 1 through 4, Method 5 for TSP, and conducted in accordance with 450 CFR 60, Appendix A. For combined TSP and PM10, testing shall be in accordance with 40 CFR 51, Appendix M, Method 201. Alternative test method(s) may be used if the Department approves the change. (NSR Permit 2195H, Specific Condition 6.b., revised)

Monitoring: N/A

Recordkeeping: The permittee shall maintain records in accordance with Section B109.

Reporting: The permittee shall submit reports described in Section A109 and in accordance with Section B110.

☒ **Yes** ☐ **No** ☐ **N/A**

Methods: Requirement: No compliance test was required or performed during this certification period.

Monitoring: N/A

Recordkeeping: Records are maintained in accordance with Section B110. No tests were conducted and no records were generated during this certification period.

Reporting: Emissions and monitoring reports are submitted on a six-month basis and compliance certification submitted on an annual basis in accordance with permit conditions A109 and B110. For more information, see comments in Section A605 of this report.

Deviations: Unit ID	Cause, Description of Deviation, and Corrective Action Taken or Tracking number	Start Date	End Date

1. Provide *Method(s) or other information or other facts used to determine the compliance status* in the "Methods:" row beneath each permit condition. 2. If you answered *No* to question 3, list *all* deviations in the *Deviations* section. For *all* Deviations that *produced* excess emissions, provide *only* **a)** the AQBCR EER Tracking Number. For *all* Deviations that *did not produce* excess emissions, provide **a)** The Unit ID, **b)** The Cause of and a Description of the Deviation, **c)** the Corrective Action, and **d)** the Start & End Dates of the deviation. Please indicate in **b)**, your *Description*, whether each deviation has been previously reported to NMED.	3. Was this facility *continuously* in compliance with *all* requirements of this condition during the reporting period?
EQUIPMENT SPECIFIC REQUIREMENTS **TA-3 POWER PLANT** **A1300 Regulated Sources – TA-3 Power Plant** **A.** Table 1300.A lists all of the process equipment authorized for this source category. **Methods:** Two new pieces of process equipment are currently being added to this facility during this certification period. The two new auxilary boilers (TA-3-22-4 and TA-3-22-5) permitted in NSR Permit 2195B-M3 are being installed and will begin operation in the first quarter of 2022.	☒ **Yes** ☐ **No** ☐ **N/A**

Deviations: Unit ID	Cause, Description of Deviation, and Corrective Action Taken or Tracking number	Start Date	End Date

A1301 Control Equipment – TA-3 Power Plant **A.** Table 1301.A lists all the pollution control equipment required for this source category. Each emission point is identified by the same number that was assigned to it in the permit application. **Methods:** No new pollution control equipment was added to this facility during this certification period.	☒ **Yes** ☐ **No** ☐ **N/A**

Deviations: Unit ID	Cause, Description of Deviation, and Corrective Action Taken or Tracking number	Start Date	End Date

A1302 Emission Limits – TA-3 Power Plant **A.** Table 1302.A lists the emission units, and their allowable emission limits. (40 CFR 50; Paragraphs 1, 7, and 8 of 20.2.70.302.A NMAC; 40 CFR 60, Subparts A and GG; NSR Permit 2195B-M2). **Methods:** Emissions are calculated and reported on a six-month basis in accordance with permit condition A109.B. Comparison against the allowable emission limits is performed at each of these reporting periods. Allowable emission limits were not exceeded during this certification period.	☒ **Yes** ☐ **No** ☐ **N/A**

Deviations: Unit ID	Cause, Description of Deviation, and Corrective Action Taken or Tracking number	Start Date	End Date

A1302 Emission Limits – TA-3 Power Plant **B.** NOx emissions (all oxides of nitrogen expressed as NO2) from the boilers (Units TA-3-22-1 through -3) shall not exceed 0.3 lb/MMBtu of heat input when burning natural gas or oil as required by 20.2.33 and 20.2.34 NMAC. (NSR Permit 2195B-M2, Specific Condition A106.B) **Methods:** Results from source compliance tests performed on the boilers and calculations located in A1307.A - Monitoring (3) demonstrate that nitrogen dioxide emissions do not exceed 0.3 lb/MMBtu of heat input.	☒ **Yes** ☐ **No** ☐ **N/A**

Deviations: Unit ID	Cause, Description of Deviation, and Corrective Action Taken or Tracking number	Start Date	End Date

A1302 Emission Limits – TA-3 Power Plant **C.** For the Combustion Turbine (Unit TA-3-22-CT-1), the permittee shall comply with the NSPS Subpart GG NOx emissions limitation of 110.4 ppmv at 15% O2, dry basis (40 CFR 63.332(a)(1) and NSR Permit 2195B-M2, Specific Condition A106.C).	

1. Provide *Method(s) or other information or other facts used to determine the compliance status* in the "Methods:" row beneath each permit condition. 2. If you answered *No* to question 3, list *all* deviations in the *Deviations* section. For *all* Deviations that *produced* excess emissions, provide *only* **a)** the AQBCR EER Tracking Number. For *all* Deviations that *did not produce* excess emissions, provide **a)** The Unit ID, **b)** The Cause of and a Description of the Deviation, **c)** the Corrective Action, and **d)** the Start & End Dates of the deviation. Please indicate in **b)**, your *Description*, whether each deviation has been previously reported to NMED.				3. Was this facility *continuously* in compliance with *all* requirements of this condition during the reporting period?
Methods: The NOx emission concentrations and rates have been measured through emission stack testing and compared to the allowable emission limit for several years. NOx concentrations are consistently below the NSPS Subpart GG, NOx emission limit. The test reports are available on-site and have been provided to NMED in previous Semi-Annual Monitoring Reports.				☒ **Yes** ☐ **No** ☐ **N/A**
Deviations: Unit ID	Cause, Description of Deviation, and Corrective Action Taken or Tracking number	Start Date	End Date	
A1302 Emission Limits – TA-3 Power Plant **D.** For the Combustion Turbine (Unit TA-3-22-CT-1), the permittee shall comply with the NSPS Subpart GG SO2 emissions limitation of 0.015% by volume at 15% O2 dry basis or through use of any fuel not exceeding 8000 ppmw total sulfur. (40 CFR 60.333 and NSR Permit 2195B-M2, Specific Condition A106.D)				☒ **Yes** ☐ **No** ☐ **N/A**
Methods: The Combustion Turbine only uses natural gas. The natural gas transportation contract stipulates that gas provided to LANL will be pipeline quality and contain no more than three quarters (3/4) grains of total sulfur per one hundred (100) dry standard cubic feet, which is just under 26 ppmw.				
Deviations: Unit ID	Cause, Description of Deviation, and Corrective Action Taken or Tracking number	Start Date	End Date	
A1303 Applicable Requirements – TA-3 Power Plant **A.** The permittee shall comply with all applicable sections of the requirements listed in Table 1303.A.				☒ **Yes** ☐ **No** ☐ **N/A**
Methods: All units listed in this section comply with the requirements listed in Table 1303.A.				
Deviations: Unit ID	Cause, Description of Deviation, and Corrective Action Taken or Tracking number	Start Date	End Date	
A1304 Operational Limitations – TA-3 Power Plant **A.** This source category is authorized to operate at any time of the day or night on any day of the year. No monitoring, recordkeeping, or reporting requirements are required to demonstrate compliance with continuous hours of operation.				☒ **Yes** ☐ **No** ☐ **N/A**
Methods: No change in operation occurred for this source category during this certification period.				
Deviations: Unit ID	Cause, Description of Deviation, and Corrective Action Taken or Tracking number	Start Date	End Date	
A1304 Operational Limitations – TA-3 Power Plant **B.** Units TA-3-22-1 through -3 shall be operated on fuel oil for no more than 48 hours per year per boiler for non-emergency maintenance and readiness testing. This condition establishes exemption from 40 CFR 63, Subpart JJJJJJ				☒ **Yes** ☐ **No** ☐ **N/A**
Methods: Fuel oil was used for maintenance and readiness testing during this certification period. The total operating hours for fuel oil was 5.4 hours.				
Deviations: Unit ID	Cause, Description of Deviation, and Corrective Action Taken or Tracking number	Start Date	End Date	

1. Provide *Method(s) or other information or other facts used to determine the compliance status* in the "Methods:" row beneath each permit condition. 2. If you answered *No* to question 3, list *all* deviations in the *Deviations* section. For *all* Deviations that *produced* excess emissions, provide *only* **a)** the AQBCR EER Tracking Number. For *all* Deviations that *did not produce* excess emissions, provide **a)** The Unit ID, **b)** The Cause of and a Description of the Deviation, **c)** the Corrective Action, and **d)** the Start & End Dates of the deviation. Please indicate in **b)**, your *Description*, whether each deviation has been previously reported to NMED.	3. Was this facility *continuously* in compliance with *all* requirements of this condition during the reporting period?
A1305 Fuel Sulfur Requirements – TA-3 Power Plant **A. Boilers (Units TA-3-22-1 through -3)** **Requirement**: External combustion sources at the TA-3 Power Plant shall combust only natural gas containing no more than 2 gr/100 scf total sulfur or No. 2 fuel oil containing no more than 0.05 wt% total sulfur. (NSR Permit 2195B-M2, Specific Condition A110.A) **Monitoring**: N/A **Recordkeeping**: The permittee shall demonstrate compliance with the limit on total fuel sulfur content by maintaining records of a current, valid purchase contract, tariff sheet or transportation contract for the gaseous or liquid fuel, or fuel analysis, specifying the fuel grade and certification or allowable sulfur limit. If fuel analysis is used, the analysis shall not be older than one year. Alternatively, compliance may be demonstrated by keeping a receipt or invoice from a commercial fuel supplier with each fuel delivery, which shall include the delivery date, the fuel type delivered, and amount of fuel delivered, and the maximum sulfur content of the fuel. **Reporting**: The permittee shall submit reports described in Section A109 and in accordance with Section B110.	☒ **Yes** ☐ **No** ☐ **N/A**
Methods: Requirement: The natural gas transportation contract states that gas provided to LANL will be pipeline quality with total sulfur content of no more than three quarters (3/4) grains of total sulfur per one hundred (100) standard cubic feet. Fuel oil for this source is located in a tank on-site and only Ultra Low Sulfur Diesel (ULSD) is delivered to the facility. ULSD contains less than 0.0015 wt% total sulfur. Monitoring: N/A Recordkeeping: A copy of the natural gas transportation contract and fuel oil purchase contract is kept on-site. No fuel oil was purchased for the TA-3 power plant during this reporting period. Reporting: Emissions and monitoring reports are submitted on a six-month basis and compliance certification on an annual basis in accordance with permit conditions A109 and B110. For more information, see comments in Section A605 of this report.	

Deviations: Unit ID	Cause, Description of Deviation, and Corrective Action Taken or Tracking number	Start Date	End Date

A1305 Fuel Sulfur Requirements – TA-3 Power Plant **B. Combustion Turbine (Unit TA-3-22-CT-1)** **Requirement:** The combustion turbine at the TA-3 Power Plant shall combust only natural gas containing no greater than 2 gr/100 scf total sulfur. (NSR Permit 2195B-M2, Specific Condition A110.B) **Monitoring**: N/A **Recordkeeping**: The permittee shall demonstrate compliance with the limit on total fuel sulfur content by maintaining records of a current, valid purchase contract, tariff sheet or transportation contract for the gaseous fuel, or fuel analysis, specifying the fuel grade and certification or allowable sulfur limit. If fuel analysis is used, the analysis shall not be older than one year. (NSR Permit 2195B-M2, Specific Condition A110.B and 40 CFR 60.334(h)) **Reporting:** The permittee shall submit reports described in Section A109 and in accordance with Section B110.	☒ **Yes** ☐ **No** ☐ **N/A**

1. Provide *Method(s) or other information or other facts used to determine the compliance status* in the "Methods:" row beneath each permit condition. 2. If you answered *No* to question 3, list *all* deviations in the *Deviations* section. For *all* Deviations that *produced* excess emissions, provide *only* **a)** the AQBCR EER Tracking Number. For *all* Deviations that *did not produce* excess emissions, provide **a)** The Unit ID, **b)** The Cause of and a Description of the Deviation, **c)** the Corrective Action, and **d)** the Start & End Dates of the deviation. Please indicate in **b)**, your *Description*, whether each deviation has been previously reported to NMED.	3. Was this facility *continuously* in compliance with *all* requirements of this condition during the reporting period?

Methods: Requirement: This requirement is met as the natural gas transportation contract states that gas provided to LANL will be pipeline quality with total sulfur content of no more than three quarters (3/4) grains of total sulfur per one hundred (100) dry standard cubic feet.

Monitoring: N/A

Recordkeeping: LANL's natural gas transportation contract is kept on-site.

Reporting: Emissions and monitoring reports are submitted on a six-month basis and compliance certification on an annual basis in accordance with permit conditions A109 and B110. For more information, see comments in Section A605 of this report.

Deviations: Unit ID	Cause, Description of Deviation, and Corrective Action Taken or Tracking number	Start Date	End Date

A1306 20.2.61 NMAC Opacity – TA-3 Power Plant

A. Sources Combusting Natural Gas

Requirement: All combustion units shall not exceed 20% opacity. (NSR Permit 2195B-M2, Specific Condition A111.A)

Monitoring: Use of natural gas fuel meeting the requirement at Condition A1305.A or B constitutes compliance with 20.2.61 NMAC unless opacity exceeds 20% averaged over a 10-minute period. When any visible emissions are observed during steady state operation and are determined to be not due to condensed water vapor only, opacity shall be measured over a 10-minute period, in accordance with the procedures at 40 CFR 60, Appendix A, Method 9 as required by 20.2.61.114 NMAC.

Recordkeeping: The permittee shall record dates of any opacity measures and the corresponding opacity readings.

Reporting: The permittee shall report dates of any opacity measures and the corresponding opacity readings. The permittee shall submit reports described in Section A109 and in accordance with Section B110.

☒ **Yes** ☐ **No**

☐ **N/A**

Methods: Requirement: LANL has certified opacity readers on-site who perform opacity readings using 40 CFR 60, Appendix A, Method 9 to determine compliance with the opacity limitation.

Monitoring: Natural gas fuel meets the requirement specified in Condition A1305.A and B. Use of natural gas fuel constitutes compliance with the 20% opacity limit. No visible emissions were observed during steady state operation during this certification period.

Recordkeeping: A standard form is used for all opacity measurements. The form includes the date of measurement and opacity observed. No opacity readings were required during this certification period.

Reporting: A standard form is used for all opacity measurements. The form includes the date and time of the Method 9 observation and opacity observed. Emissions and monitoring reports are submitted on a six-month basis and compliance certification on an annual basis in accordance with permit conditions A109 and B110. For more information, see comments in Section A605 of this report.

Deviations: Unit ID	Cause, Description of Deviation, and Corrective Action Taken or Tracking number	Start Date	End Date

A1306 20.2.61 NMAC Opacity – TA-3 Power Plant

1. Provide *Method(s) or other information or other facts used to determine the compliance status* in the "Methods:" row beneath each permit condition. 2. If you answered *No* to question 3, list *all* deviations in the *Deviations* section. For *all* Deviations that *produced* excess emissions, provide *only* **a)** the AQBCR EER Tracking Number. For *all* Deviations that *did not produce* excess emissions, provide **a)** The Unit ID, **b)** The Cause of and a Description of the Deviation, **c)** the Corrective Action, and **d)** the Start & End Dates of the deviation. Please indicate in **b)**, your *Description*, whether each deviation has been previously reported to NMED.	3. Was this facility *continuously* in compliance with *all* requirements of this condition during the reporting period?
B. Boilers Combusting No. 2 Fuel Oil **Requirement:** All combustion units shall not exceed 20% opacity. (NSR Permit 2195B-M2, Specific Condition A111.B) **Monitoring**: During steady state operation, opacity shall be measured over a 10-minute period in accordance with the procedures at 40 CFR 60, Appendix A, Method 9 as required by 20.2.61.114 NMAC. Opacity measurements shall be conducted on a quarterly basis per calendar year whenever the boiler(s) are operational during the monitoring period. This requirement is subject to the monitoring provisions of Condition B108.D. **Recordkeeping**: The permittee shall maintain records of all Method 9 observations, and in accordance with Section B109. **Reporting**: The permittee shall report date, time, and results of all Method 9 observations. The permittee shall submit reports described in Section A109 and in accordance with Section B110.	
Methods: Requirement: Certified opacity readers are located on-site who perform opacity readings using 40 CFR 60, Appendix A, Method 9 to determine compliance with the opacity limitation. Fuel oil was used and the opacity limit was not exceeded during this certification period. Monitoring: Opacity is read at least once per quarter when boilers are combusting fuel oil and when required by monitoring provisions in condition B108.D. Opacity readings are measured over a 10-minute period and in accordance with 40 CFR 60, Appendix A, Method 9. A standard form is used for all opacity measurements. The form includes the date of measurement and opacity observed. Fuel oil was used during this certification period and Method 9 opacity measurements were conducted. Recordkeeping: Records are maintained in accordance with Section B109. Reporting: A standard form is used for all opacity measurements. The form includes the date and time of the Method 9 observation and opacity observed. Emissions and monitoring reports are submitted on a six-month basis and compliance certification on an annual basis in accordance with permit conditions A109 and B110. For more information, see comments in Section A605 of this report.	☒ **Yes** ☐ **No** ☐ **N/A**

Deviations: Unit ID	Cause, Description of Deviation, and Corrective Action Taken or Tracking number	Start Date	End Date

A1307 Other – TA-3 Power Plant **A. Emission calculations (TA-3 Power Plant)** **Requirement**: The permittee shall comply with the hourly and annual emission limits at Table1302.A. and Conditions A1302.B, C, and D for the combustion turbine and boilers. The boiler annual emission limit shall be expressed as the combined emissions from all 3 boilers. (NSR Permit 2195B-M2, Specific Condition A801.A) **Monitoring**: The permittee shall perform the following calculations on a monthly basis: 1) Calculate the average hourly emissions rates (pph) for each emissions unit based on the monthly total fuel consumption and monthly actual hours of operation. 2) Calculate the actual annual emissions rates (tpy) for all emissions units based on the monthly rolling 12-month total fuel consumption and the	☒ **Yes** ☐ **No** ☐ **N/A**

1. Provide *Method(s) or other information or other facts used to determine the compliance status* in the "Methods:" row beneath each permit condition. 2. If you answered *No* to question 3, list *all* deviations in the *Deviations* section. For *all* Deviations that *produced* excess emissions, provide *only* **a)** the AQBCR EER Tracking Number. For *all* Deviations that *did not produce* excess emissions, provide **a)** The Unit ID, **b)** The Cause of and a Description of the Deviation, **c)** the Corrective Action, and **d)** the Start & End Dates of the deviation. Please indicate in **b)**, your *Description*, whether each deviation has been previously reported to NMED.	3. Was this facility *continuously* in compliance with *all* requirements of this condition during the reporting period?

monthly rolling 12-month total hours of operation.

3) All NOx emission rates for the boilers shall also be calculated in terms of lb/MMBtu heat input.

(NSR Permit 2195B-M2, Specific Condition A801.A)

Recordkeeping: The permittee shall maintain records in accordance with Section B109.

Reporting: The permittee shall submit reports described in Section A109 and in accordance with Section B110.

Methods: Requirement: All emissions calculations required by this section are performed for the emission units listed. The emission units did not exceed the hourly or annual emission limits.

Monitoring: Emissions spreadsheets are in place that calculate all required emissions and are used for monitoring and reporting purposes.

1) The average hourly emission rates are included in the spreadsheet.

2) The actual annual emission rates are included in the spreadsheet.

3) The emission rates are based on the emission factor for NOx (lbs/MMscf), which is 58 lbs/MMscf, this factor is converted to lbs/MMBtu by dividing by the high heat value of natural gas (the number of Btu in a scf). As the HHV of natural gas ranges in value, the emission range was calculated using the low and high values at LANL between 2011 and 2021, the lowest was 939.97 Btu/scf and the highest was 1079.3 Btu/scf, therefore the NOx emission rate will range from 0.0537 to 0.0617 lbs/MMBtu.

Recordkeeping: Records are maintained in accordance with Section B109.

Reporting: Emissions and monitoring reports are submitted on a six-month basis and compliance certification on an annual basis in accordance with permit conditions A109 and B110. For more information, see comments in Section A605 of this report.

Deviations: Unit ID	Cause, Description of Deviation, and Corrective Action Taken or Tracking number	Start Date	End Date

A1307 Other – TA-3 Power Plant

B. Fuel Usage (Boilers, Units TA-3-22-1 through -3)

Requirement: Combined boiler operation shall not consume more than 1000 MMscf of natural gas and no more than 500,000 gallons of No. 2 fuel oil in any 12-month period. Volumetric natural gas fuel flow shall be measured using gas flowmeters installed on the natural gas fuel inlet to each respective unit (3 separate gas flowmeters). Fuel oil usage shall be measured using a single inventory meter located at a storage tank that is dedicated for use by the TA-3 power plant boilers. (NSR Permit 2195B-M2, Specific Condition A803.A, revised)

☒ **Yes** ☐ **No**

☐ **N/A**

Monitoring: The liquid fuel flow rate shall be continuously monitored whenever liquid fuel is combusted. The natural gas fuel flow rate for each boiler shall be continuously monitored whenever natural gas is combusted. The hours of operation of each boiler shall be continuously monitored. (NSR Permit 2195B-M2, Specific Condition A803.A, revised)

Recordkeeping: The permittee shall record the monthly total of liquid fuel (gallons) for all boilers combined and gaseous fuel (scf) for each boiler on a monthly basis, to include a monthly total. Annual fuel usage shall be calculated and recorded on a monthly rolling 12-month total basis. The permittee

1. Provide *Method(s) or other information or other facts used to determine the compliance status* in the "Methods:" row beneath each permit condition. 2. If you answered *No* to question 3, list *all* deviations in the *Deviations* section. For *all* Deviations that *produced* excess emissions, provide *only* **a)** the AQBCR EER Tracking Number. For *all* Deviations that *did not produce* excess emissions, provide **a)** The Unit ID, **b)** The Cause of and a Description of the Deviation, **c)** the Corrective Action, and **d)** the Start & End Dates of the deviation. Please indicate in **b)**, your *Description*, whether each deviation has been previously reported to NMED.	3. Was this facility *continuously* in compliance with *all* requirements of this condition during the reporting period?

shall record the hours of operation of each boiler on a monthly basis, to include a monthly total. The record shall include the monthly rolling 12-month total hours of operation for all 3 boilers combined. The permittee shall maintain records in accordance with Section B109. (NSR Permit 2195B-M2, Specific Conditon A803.A, revised)

Reporting: The permittee shall submit reports described in Section A109 and in accordance with Section B110.

Methods: Requirement: The combined boiler natural gas use did not exceed 1,000 MMscf or 500,000 gallons of No. 2 fuel oil in any 12-month period. Volumetric flow is measured using the liquid or gas fuel flowmeters installed on the natural gas fuel inlet to each respective unit and on the combined fuel oil inlet to the boilers. All fuel use data are tracked monthly in a spreadsheet used for emission calculations.

Monitoring: Natural gas fuel meters are in place on each of the boilers. Fuel oil is measured using control panel readings. Both natural gas and fuel oil are continuously monitored when being combusted. A monthly and 12-month rolling total of both natural gas and fuel oil use are recorded and reviewed monthly to verify usage does not exceed allowable limits.

Recordkeeping: Total monthly liquid fuel for all boilers and gaseous fuel for each boiler were recorded on a monthly basis. The annual fuel usage was calculated and recorded on a monthly rolling 12-month total basis. Total hours of operation of each boiler are recorded monthly and included in a monthly rolling 12-month total hours for all boilers combined. Hours of operation of each boiler are continuously monitored. This data is collected monthly from the power plant operations staff. Records are maintained in accordance with Section B109.

Reporting: Emissions and monitoring reports are submitted on a six-month basis and compliance certification on an annual basis in accordance with permit conditions A109 and B110. For more information, see comments in Section A605 of this report.

Deviations: Unit ID	Cause, Description of Deviation, and Corrective Action Taken or Tracking number	Start Date	End Date

A1307 Other – TA-3 Power Plant

C. Fuel Usage (Combustion Turbine, Unit TA-2-22-CT-1)

Requirement: The combustion turbine shall not consume more than 1400 MMscf of natural gas in any 12-month period. Volumetric flow shall be measured using a gas fuel flowmeter installed on the fuel inlet of the combustion turbine. (NSR Permit 2195B-M2, Specific Condition A802.A)

Monitoring: The natural gas fuel flow rate for the combustion turbine shall be continuously monitored whenever natural gas is combusted. (NSR Permit 2195B-M2, Specific Condition A802.A)

Recordkeeping: The permittee shall record the daily total of gaseous fuel (scf) for the turbine on a monthly basis, to include a monthly total. Annual fuel usage shall be calculated and recorded on a monthly rolling 12-month total basis. The permittee shall record the daily hours of operation of the combustion turbine on a monthly basis, to include a monthly total. The record shall include the monthly total hours and monthly rolling 12-month total hours of operation. The permittee shall maintain records in accordance with Section B109. (NSR Permit 2195B-M2, Specific Condition A802.A)

Reporting: The permittee shall submit reports described in Section A109 and in accordance with Section B110.

☒ **Yes** ☐ **No**

☐ **N/A**

1. Provide *Method(s) or other information or other facts used to determine the compliance status* in the "Methods:" row beneath each permit condition. 2. If you answered *No* to question 3, list *all* deviations in the *Deviations* section. For *all* Deviations that *produced* excess emissions, provide *only* **a)** the AQBCR EER Tracking Number. For *all* Deviations that *did not produce* excess emissions, provide **a)** The Unit ID, **b)** The Cause of and a Description of the Deviation, **c)** the Corrective Action, and **d)** the Start & End Dates of the deviation. Please indicate in **b)**, your *Description*, whether each deviation has been previously reported to NMED.	3. Was this facility *continuously* in compliance with *all* requirements of this condition during the reporting period?

Methods: Requirement: A 12-month rolling total for natural gas use is maintained and reviewed to verify usage does not exceed 1400 MMscf. The daily and monthly total fuel use is collected and recorded monthly in a spreadsheet used for calculating emissions.

Monitoring: The natural gas flowmeter is installed on the turbine inlet. The fuel flowmeter continuously measures natural gas being delivered to the combustion turbine.

Recordkeeping: Daily hours of operation are collected monthly and entered into the spreadsheet. A 12-month rolling total hours of operation is calculated using this information. Records are maintained in accordance with Section B109.

Reporting: Emissions and monitoring reports are submitted on a six-month basis and compliance certification on an annual basis in accordance with permit conditions A109 and B110. For more information, see comments in Section A605 of this report.

Deviations: Unit ID	Cause, Description of Deviation, and Corrective Action Taken or Tracking number	Start Date	End Date

A1307 Other – TA-3 Power Plant

D. Load Requirement (Combustion Turbine, Unit TA-3-22-CT-1)

Requirement: The combustion turbine shall be operated at no less than 80% and no greater than 100% load as determined by the manufacturer's supplied algorithm, except for minimal periods during startup and shutdown conditions. The permittee shall follow the manufacturer's recommended startup/shutdown procedures in order to minimize the duration of these events. (NSR Permit 2195B-M2, Specific Condition A802.B)

Monitoring: The operating load of the combustion turbine shall be monitored once daily during normal operations of that unit. (NSR Permit 2195B-M2, Specific Condition A802.B)

Recordkeeping: The permittee shall record the daily monitored operating load for the combustion turbine. The permittee shall maintain a record of the manufacturer's recommended startup/shutdown procedure and the manufacturer's criteria for the determination of turbine load. The permittee shall maintain a record for each startup/shutdown or malfunction event for the combustion turbine. The record shall include the date, the start/end time and duration for each event, which is defined as the length of time the combustion turbine is operating at less than 80% or greater than 100% load. For any malfunction event, the record shall also include the nature of the malfunction and any corrective action taken. The permittee shall maintain records in accordance with Section B109. (NSR Permit 2195B-M2, Specific Condition A802.B)

Reporting: The permittee shall submit reports described in Section A109 and in accordance with Section B110.

☒ **Yes** ☐ **No**

☐ **N/A**

1. Provide *Method(s) or other information or other facts used to determine the compliance status* in the "Methods:" row beneath each permit condition. 2. If you answered *No* to question 3, list *all* deviations in the *Deviations* section. For *all* Deviations that *produced* excess emissions, provide *only* **a)** the AQBCR EER Tracking Number. For *all* Deviations that *did not produce* excess emissions, provide **a)** The Unit ID, **b)** The Cause of and a Description of the Deviation, **c)** the Corrective Action, and **d)** the Start & End Dates of the deviation. Please indicate in **b)**, your *Description*, whether each deviation has been previously reported to NMED.	3. Was this facility *continuously* in compliance with *all* requirements of this condition during the reporting period?

Methods: Requirement: The combustion turbine load was maintained between 80% and 100% during this reporting period, except for brief periods during a power stabilizing system tuning on 4/20/2021 and a break-in test for Siemens on 6/29/2021. Performance testing is required to ensure the unit is operating safely and these tests are crucial to the safe operation of the equipment.

Load range is calculated by the turbine operating system and is manually recorded during each operation.

Startup/shutdown procedures are in place and are followed by the unit operators.

Monitoring: Load range is calculated by the turbine operating system and is manually recorded each hour during normal operation. The operating load is recorded at least once daily during normal operations. This data is collected in the daily operating log. Startup/shutdown procedures are in place and are followed by the unit operators. Each time the unit is started or shut down, the data is entered into a daily operating log, which is maintained on-site. The record includes the date, start/end times, and duration.

Recordkeeping: The operating load is recorded at least once daily during normal operations. This data is collected in the daily operating log. Startup/shutdown procedures are in place and are followed by the unit operators. Each time the unit is started or shut down, the data is entered into a daily operating log, which is maintained on-site. The record includes the date, start/end times, and duration. Records are maintained in accordance with Section B109.

Reporting: Emissions and monitoring reports are submitted on a six-month basis and compliance certification on an annual basis in accordance with permit conditions A109 and B110. For more information, see comments in Section A605 of this report.

Deviations: Unit ID	Cause, Description of Deviation, and Corrective Action Taken or Tracking number	Start Date	End Date

A1307 Other – TA-3 Power Plant

E. Control Device Operation (Boilers, Units TA-3-22-1 through -3)

Requirement: Each boiler (Units TA-3-22-1 through -3) shall only be operated with a properly operating flue gas recirculation fan (Units F-1 through -3, respectively). Any malfunction of the flue gas recirculation system during boiler operation may be subject to the excess emissions requirements of 20.2.7 NMAC. (NSR Permit 2195B-M2, Specific Condition A803.B)

Monitoring: The flue gas recirculating fans shall be inspected for proper operation and maintenance once during each calendar month that the unit was operating. (NSR Permit 2195B-M2, Specific Condition A803.B)

Recordkeeping: The permittee shall record all inspections of the flue gas recirculating fans and any event during which a fan malfunctions. The record shall include the date, time, name of operator conducting the inspection, and any discrepancies noted. For malfunction events, the record shall also include the nature and duration of the malfunction, and any corrective action taken. The permittee shall maintain records in accordance with Section B109. (NSR Permit 2195B-M2, Specific Condition A803.B)

Reporting: The permittee shall submit reports described in Section A109 and in accordance with Section B110.

☒ **Yes** ☐ **No**

☐ **N/A**

1. Provide *Method(s) or other information or other facts used to determine the compliance status* in the "Methods:" row beneath each permit condition. 2. If you answered *No* to question 3, list *all* deviations in the *Deviations* section. For *all* Deviations that *produced* excess emissions, provide *only* **a)** the AQBCR EER Tracking Number. For *all* Deviations that *did not produce* excess emissions, provide **a)** The Unit ID, **b)** The Cause of and a Description of the Deviation, **c)** the Corrective Action, and **d)** the Start & End Dates of the deviation. Please indicate in **b)**, your *Description*, whether each deviation has been previously reported to NMED.	3. Was this facility *continuously* in compliance with *all* requirements of this condition during the reporting period?

Methods: Requirement: When a boiler is in operation, the associated flue gas recirculation (FGR) fan is operating. A fan speed indicator is located on the control panel in the operator control room. This fan speed is monitored and recorded during boiler operation. No malfunctions of the FGR systems occurred during this certification period.

Monitoring: The FGR fans are inspected for proper operation and maintenance each month the unit is operating.

Recordkeeping: Records of inspection and maintenance of the FGR fans are completed monthly. No malfunctions occurred during this certification period. All inspection records contain the required data found in this section. Records are maintained in accordance with Section B109.

Reporting: Emissions and monitoring reports are submitted on a six-month basis and compliance certification on an annual basis in accordance with permit conditions A109 and B110. For more information, see comments in Section A605 of this report.

Deviations: Unit ID	Cause, Description of Deviation, and Corrective Action Taken or Tracking number	Start Date	End Date

A1307 Other – TA-3 Power Plant

F. Control Device Operation (Combustion Turbine, Unit TA-3-22-CT-1)

Requirement: The combustion turbine shall be equipped with Rolls-Royce Dry Low Emissions (DLE) control technology (pre-mix, lean-burn series staged combustion system) to control NOx emissions. (NSR Permit 2195B-M2, Specific Condition A802.C)

Monitoring: N/A

Recordkeeping: The permittee shall maintain a record of the DLE system associated with the combustion turbine. The permittee shall maintain records in accordance with Section B109. (NSR Permit 2195B-M2, Specific Condition A802.C)

Reporting: The permittee shall submit reports described in Section A109 and in accordance with Section B110.

☒ **Yes** ☐ **No**

☐ **N/A**

Methods: Requirement: The combustion turbine is equipped with the Dry Low Emissions (DLE) control technology. The DLE control was evaluated during unit start-up and determined to be working as designed. Manufacturer data are available on the DLE system.

Recordkeeping: Records of the DLE system associated with the combustion turbine were all maintained in accordance with Section B109.

Reporting: Emissions and monitoring reports are submitted on a six-month basis and compliance certification on an annual basis in accordance with permit conditions A109 and B110. For more information, see comments in Section A605 of this report.

Deviations: Unit ID	Cause, Description of Deviation, and Corrective Action Taken or Tracking number	Start Date	End Date

A1307 Other – TA-3 Power Plant

G. 40 CFR 60, Subparts A and GG (Combustion Turbine, Unit TA-3-22-CT-1)

Requirement: The combustion turbine is subject to 40 CFR 60, Subpart GG and the permittee shall comply with the applicable requirements of 40 CFR 60, Subpart A and Subpart GG. (NSR Permit 2195B-M2, Specific Condition A802.D)

☒ **Yes** ☐ **No**

☐ **N/A**

Monitoring: The permittee shall comply with the monitoring and testing requirements of 40 CFR 60.334 and 60.335. (NSR Permit 2195B-M2, Specific

1. Provide *Method(s) or other information or other facts used to determine the compliance status* in the "Methods:" row beneath each permit condition. 2. If you answered *No* to question 3, list *all* deviations in the *Deviations* section. For *all* Deviations that *produced* excess emissions, provide *only* **a)** the AQBCR EER Tracking Number. For *all* Deviations that *did not produce* excess emissions, provide **a)** The Unit ID, **b)** The Cause of and a Description of the Deviation, **c)** the Corrective Action, and **d)** the Start & End Dates of the deviation. Please indicate in **b)**, your *Description*, whether each deviation has been previously reported to NMED.	3. Was this facility *continuously* in compliance with *all* requirements of this condition during the reporting period?

Condition A802.D)

Recordkeeping: The permittee shall comply with the recordkeeping requirements of 40 CFR 60.334 and 40 CFR 60.7. (NSR Permit 2195B-M1-R2, Specific Condition A802.D)

Reporting: The permittee shall comply with the reporting requirements of 40 CFR 60.7. (NSR Permit 2195B-M1-R2, Specific Condition A802.D)

Methods: Requirement: The combustion turbine is in compliance with 40 CFR Part 60 Subpart A and 40 CFR Part 60 Subpart GG.

Monitoring: The combustion turbine is in compliance with the monitoring and test requirements of 40 CFR 60.334 and 60.335.

Recordkeeping: The combustion turbine is in compliance with the monitoring, notification, and record keeping requirements of 40 CFR 60.334 and 40 CFR 60.7.

Reporting: The combustion turbine is in compliance with the reporting requirements of 40 CFR 60.7.

Deviations: Unit ID	Cause, Description of Deviation, and Corrective Action Taken or Tracking number	Start Date	End Date

A1307 Other – TA-3 Power Plant

H. Periodic Emissions Tests (Combustion Turbine, Unit TA-3-22-CT-1)

Requirement: The permittee shall comply with the allowable emission limits at Table A1302.A, including the NOx ppmv limitation. (NSR Permit 2195B-M2, Specific Condition A802.E)

Monitoring: The permittee shall test using a portable analyzer or EPA Reference Methods subject to the requirements and limitations of Section B108, General Monitoring Requirements. For periodic testing of NOx and CO emissions tests shall be carried out as described below.

Test results that demonstrate compliance with the NOx and CO emission limits shall also be considered to demonstrate compliance with the VOC emission limits.

(1) The test period shall be annually, based on a calendar year.

(2) The tests shall continue based on the existing testing schedule.

(3) All subsequent monitoring shall occur in each succeeding monitoring period. No two monitoring events shall occur closer together in time than 25% of a monitoring period.

(4) The permittee shall follow the General Testing Procedures of Section B111.

(5) Performance testing required by 40 CFR 60, Subpart GG or 40 CFR 60, Subpart KKKK may be used to satisfy these periodic testing requirements if they meet the requirements of this condition and are completed during the specified monitoring period.

Recordkeeping: The permittee shall maintain records in accordance with Section B109. The permittee shall also record the results of the periodic emissions tests, including the turbine's fuel flow rate and horsepower at the time of the test, and the type of fuel fired (natural gas, field gas, etc.).

If a combustion analyzer is used to measure excess air in the exhaust gas, records shall be kept of the make and model of the instrument and instrument

☒ **Yes** ☐ **No**

☐ **N/A**

1. Provide *Method(s) or other information or other facts used to determine the compliance status* in the "Methods:" row beneath each permit condition. 2. If you answered *No* to question 3, list *all* deviations in the *Deviations* section. For *all* Deviations that *produced* excess emissions, provide *only* **a)** the AQBCR EER Tracking Number. For *all* Deviations that *did not produce* excess emissions, provide **a)** The Unit ID, **b)** The Cause of and a Description of the Deviation, **c)** the Corrective Action, and **d)** the Start & End Dates of the deviation. Please indicate in **b)**, your *Description*, whether each deviation has been previously reported to NMED.	3. Was this facility *continuously* in compliance with *all* requirements of this condition during the reporting period?

calibration data. If an ORSAT apparatus or other gas absorption analyzer is used, the permittee shall record all calibration results.

The permittee shall also keep records of all raw data used to determine exhaust gas flow and of all calculations used to determine flow rates and mass emissions rates.

Reporting: The permittee shall report in accordance with Section B109, B110, and B111.

Methods: Requirement: The facility is in compliance with the allowable emission limits in Table A1302.A, including the NOx ppmv limitation, as demonstrated in the monitoring and reporting sections below.

Monitoring: The test followed the requirements and limitations required in Section B108. A combustion analyzer is used for this periodic emissions test. Instrument and calibration data are included in the final test report. An ORSAT or other similar gas absorption analyzer is not used. Results from the test demonstrate compliance with NOx and CO emission limits and thus the VOC emission limits. No limits were exceeded.

1) An emission stack test was conducted on December 8, 2021; the test results demonstrated that the actual emissions were less than the allowable emissions.

2) No additional stack testing was required during this certification period.

3) The tests are performed annually if required, or at a frequency as specified in General Condition B108.D based on the percentage of time the unit has operated.

4) The stack test was performed following the monitoring requirements required in Section B108 and general testing procedures found in Section B111. Records of periodic emissions test include all data required by this section.

5) Performance testing met the requirements of this condition and were completed during the specified monitoring period.

Recordkeeping: The test followed the requirements and limitations required in Section B109. Records are kept of the periodic emissions test results, including the turbine's fuel flow rate and horsepower, and the type of fuel fired. A combustion analyzer is used for this periodic emissions test. Instrument and calibration data are included in the final test report. An ORSAT or other similar gas absorption analyzer is not used. Raw data and calculations are included in the test report.

Reporting: Emission and monitoring reports are submitted on a six-month basis and compliance certification on an annual basis in accordance with permit conditions A109, B110, and B111. For more information, see comments in Section A605 of this report.

Deviations: Unit ID	Cause, Description of Deviation, and Corrective Action Taken or Tracking number	Start Date	End Date

EQUIPMENT SPECIFIC REQUIREMENTS

OPEN BURNING

A1400 Regulated Sources – Open Burning

A. Table 1400.A lists all of the process equipment authorized for this source category.

☒ **Yes** ☐ **No**

☐ **N/A**

1. Provide *Method(s) or other information or other facts used to determine the compliance status* in the "Methods:" row beneath each permit condition. 2. If you answered *No* to question 3, list *all* deviations in the *Deviations* section. For *all* Deviations that *produced* excess emissions, provide *only* **a)** the AQBCR EER Tracking Number. For *all* Deviations that *did not produce* excess emissions, provide **a)** The Unit ID, **b)** The Cause of and a Description of the Deviation, **c)** the Corrective Action, and **d)** the Start & End Dates of the deviation. Please indicate in **b)**, your *Description*, whether each deviation has been previously reported to NMED.				3. Was this facility *continuously* in compliance with *all* requirements of this condition during the reporting period?
Methods: No open burning occurred during this certification period.				
Deviations: Unit ID	Cause, Description of Deviation, and Corrective Action Taken or Tracking number	Start Date	End Date	

A1402 Emission Limits – Open Burning **A.** Table 1402.A lists the emission units, and their allowable emission limits. (40 CFR 50; Paragraphs 1, 7, and 8 of 20.2.70.302.A NMAC; 20.2.60 NMAC; 20.2.65 NMAC).				☒ **Yes** ☐ **No** ☐ **N/A**
Methods: No open burning occurred during this certification period.				
Deviations: Unit ID	Cause, Description of Deviation, and Corrective Action Taken or Tracking number	Start Date	End Date	

A1403 Applicable Requirements – Open Burning **A.** The permittee shall comply with all applicable sections of the requirements listed in Table 1403.A.				☒ **Yes** ☐ **No** ☐ **N/A**
Methods: No open burning occurred during this certification period.				
Deviations: Unit ID	Cause, Description of Deviation, and Corrective Action Taken or Tracking number	Start Date	End Date	

A1404 Operational Limitations – Open Burning

A. This source category is authorized to operate at any time of the day or night on any day of the year. No monitoring, recordkeeping, or reporting requirements are required to demonstrate compliance with continuous hours of operation.

A1407 Other – Open Burning

A. Operational

Requirement: The permittee shall comply with the applicable requirements of 20.2.60 NMAC and 20.2.65 NMAC, including, but not limited to:

1) Prior to initiating a burn consisting of vegetative material, the permittee shall submit to the Department a sampling and analysis plan and upon approval conduct representative sampling of the intended burn material and analyze samples for radionuclides, target analyte list (TAL) inorganic elements, polychlorinated biphenyls (PCBs), and high explosives (HE); and
2) The permittee shall submit to the Department a background concentration report for the contaminants listed in Condition A1407.A, Requirement (1). The report shall indicate locations where background concentrations were taken and compare sample results with background concentrations of the constituents; and
3) The permittee shall not burn vegetative material which includes any contaminant above the relevant background concentration; and
4) Upon receiving Department approval, the permittee shall conduct public notification in a display ad in at least four newspapers: Los Alamos Monitor, Rio Grande Sun, Santa Fe New Mexican, and the Albuquerque Journal, no less than 21 days in advance of a planned burn.

Monitoring: The permittee shall monitor all open burning as required by Department regulation or burn approval.

☒ **Yes** ☐ **No**
☐ **N/A**

1. Provide *Method(s) or other information or other facts used to determine the compliance status* in the "Methods:" row beneath each permit condition. 2. If you answered *No* to question 3, list *all* deviations in the *Deviations* section. For *all* Deviations that *produced* excess emissions, provide *only* **a)** the AQBCR EER Tracking Number. For *all* Deviations that *did not produce* excess emissions, provide **a)** The Unit ID, **b)** The Cause of and a Description of the Deviation, **c)** the Corrective Action, and **d)** the Start & End Dates of the deviation. Please indicate in **b)**, your *Description*, whether each deviation has been previously reported to NMED.	3. Was this facility *continuously* in compliance with *all* requirements of this condition during the reporting period?

Recordkeeping: The permittee shall maintain records of all sampling and analysis plans and any representative sampling conducted. Records shall be kept in accordance with Section B109.

Reporting: The permittee shall submit reports as outlined in the Condition 1407.A Requirements, as described in Section A109, and in accordance with Section B110.

Methods: No open burning occurred during this certification period.

Deviations: Unit ID	Cause, Description of Deviation, and Corrective Action Taken or Tracking number	Start Date	End Date

EQUIPMENT SPECIFIC REQUIREMENTS

EVAPORATIVE SPRAYERS

P100-R2M1 - A1500 Regulated Sources – Evaporative Sprayers

☒ **Yes** ☐ **No** ☐ **N/A**

A. Table A1500.A lists all of the process equipment for this source category

Methods: No new process equipment has been added to this facility during this certification period.

Deviations: Unit ID	Cause, Description of Deviation, and Corrective Action Taken or Tracking number	Start Date	End Date

P100-R2M4 - A1500 Regulated Sources – Evaporative Sprayers – TA-60 SERF

☒ **Yes** ☐ **No** ☐ **N/A**

A. Table A1500.A lists all regulated air emission sources at the TA-60 SERF facility.

Methods: No new regulated air emission sources have been added to this facility during this certification period.

Deviations: Unit ID	Cause, Description of Deviation, and Corrective Action Taken or Tracking number	Start Date	End Date

P100-R2M1 - A1502 Emission Limits – Evaporative Sprayers

☒ **Yes** ☐ **No** ☐ **N/A**

A. The federally enforceable work practice standards in Conditions A1507.A and B establish the emissions allowable under the permit (20.2.70.7.H and I NMAC) since separate numerical pph and tpy emission limits for TSP, PM10, VOCs, and HAPs from the evaporators are not appropriate for this operating scenario. Hazardous air pollutants (HAPs) from the evaporative coolers are included in and subject to the individual and total HAP facility-wide emission limits in Table 106.B.

Methods: The facility is in compliance with the standards in A1507.A and B that establish the HAP emission limits in Table 106B. HAP emissions were below the individual and total facility-wide emissions limits as demonstrated in the monitoring, recordkeeping and reporting sections in the Semi-Annual Monitoring Reports.

Deviations: Unit ID	Cause, Description of Deviation, and Corrective Action Taken or Tracking number	Start Date	End Date

P100-R2M4 - A1502 Emissions Inventory and Reporting – TA-60 SERF – Evaporative Sprayers

1. Provide *Method(s) or other information or other facts used to determine the compliance status* in the "Methods:" row beneath each permit condition. 2. If you answered *No* to question 3, list *all* deviations in the *Deviations* section. For *all* Deviations that *produced* excess emissions, provide *only* **a)** the AQBCR EER Tracking Number. For *all* Deviations that *did not produce* excess emissions, provide **a)** The Unit ID, **b)** The Cause of and a Description of the Deviation, **c)** the Corrective Action, and **d)** the Start & End Dates of the deviation. Please indicate in **b)**, your *Description*, whether each deviation has been previously reported to NMED.	3. Was this facility *continuously* in compliance with *all* requirements of this condition during the reporting period?
A. The permittee shall report actual ton per year (tpy) emissions of regulated air pollutants from the SERF evaporative sprayers as follows: (1) Actual ton per year (tpy) emission rates from the SERF sprayers of individual and total hazardous air pollutants (HAPs) shall be determined and applied toward the facility-wide HAPs tpy emission limit caps in Table 106.B (P100-R2M1), shall be included in the semi-annual emissions inventory report required at A109.A (P100-R2M1), and shall be included in the annual emissions inventory reports required by 20.2.73 NMAC and Condition B110.H (P100-R2M1). (2) Actual pph and tpy emission rates of particulate matter (PM), PM10, and PM2.5 shall be included in the annual emissions inventory reports required by 20.2.73 NMAC and Condition B110.H (P100-R2M1) but are not applied toward the facility-wide emission limit caps for those pollutants in Table 106.B. Only emissions from stacks (point sources) of those pollutants count toward these PSD synthetic minor limits in Table 106.B (P100-R2M1).	
Methods: 1) The facility is in compliance with the allowable emissions limits in Table 106.B by calculating the annual total HAP emissions in tons per year. HAP emissions were below the individual and total facility-wide emissions limits as demonstrated in the Semi-Annual and Annual Emission Inventory Reports. The Semi-Annual Emissions Reports were submitted within the allowed 90 days following the end of every six-month reporting period as required by A109.A. During calendar year 2021, two emissions reports were submitted. The Semi-Annual Emissions Report for July 1 - December 31, 2020, was submitted on March 29, 2021 (SBR20210003). The Semi-Annual Emissions Report for January 1 - June 30, 2021, was submitted on September 22, 2021 (SBR20210005). The Annual Emission Inventory Report required by 20.2.73 NMAC and Condition B110.H was submitted electronically via NMED's online reporting tool, AEIR, on March 22, 2021. 2) The facility included the actual pph and tpy emission rates for particulate matter in the Annual Emission Inventory required under 20.2.73 NMAC and Condition B110.H.	☒ **Yes** ☐ **No** ☐ **N/A**

Deviations: Unit ID	Cause, Description of Deviation, and Corrective Action Taken or Tracking number	Start Date	End Date

A1503 Applicable Requirements – Evaporative Sprayers

A. There are no additional applicable requirements other than those listed for the entire facility in Table 103.A.

P100-R2M1 - A1507 Evaporative Sprayers–Work Practice Standards

A. Operational Requirements (Evaporative Sprayers)

Requirement: Compliance with the allowable emission limits in Table 106.B shall be demonstrated by calculating the annual total HAPs emissions in tons per year. The emissions shall be calculated based on the most recent water analysis and hours of operation for the evaporative sprayers.

Monitoring: The permittee shall conduct an analysis of the basin water, including analytical results (water concentrations) for all HAPs and TAPs, at the Sanitary Effluent Reclamation Facility (SERF) every two years beginning no later than calendar year 2018. The permittee shall monitor the hours of operation for each sprayer.

☒ **Yes** ☐ **No**

☐ **N/A**

1. Provide *Method(s) or other information or other facts used to determine the compliance status* in the "Methods:" row beneath each permit condition. 2. If you answered *No* to question 3, list *all* deviations in the *Deviations* section. For *all* Deviations that *produced* excess emissions, provide *only* **a)** the AQBCR EER Tracking Number. For *all* Deviations that *did not produce* excess emissions, provide **a)** The Unit ID, **b)** The Cause of and a Description of the Deviation, **c)** the Corrective Action, and **d)** the Start & End Dates of the deviation. Please indicate in **b)**, your *Description*, whether each deviation has been previously reported to NMED.	3. Was this facility *continuously* in compliance with *all* requirements of this condition during the reporting period?
Recordkeeping: The permittee shall record a monthly rolling, 12-month total of HAPs emissions based on the sum of emissions from all the evaporative sprayers. The emission factors for the HAPs shall be based on the values from the most recent water analysis. **Reporting:** The permittee shall submit reports described in Section A109 and in accordance with Section B111. An electronic copy of the required water analysis including analytical results (water concentrations) for all HAPs, TAPs, and the total dissolved solids (TDS) shall be sent to AQB with the Semi-annual Monitoring Report specified in A109.A for any year in which the water sampling is conducted.	
Methods: Requirement: The facility is in compliance with the allowable emissions limits in Table 106.B by calculating the annual total HAP emissions in tons per year. The most recent water analysis results and hours of operation are used to calculate the emissions. Monitoring: The facility conducts analysis of the basin water for HAPs and TAPs every two years effective 2018. Basin water sampling was conducted in November and December of 2020. The hours of operation are monitored and tabulated. Recordkeeping: Records are kept on-site and include the monthly rolling and 12-month total of HAPs emissions based on the sum of emissions from all the evaporative sprayers. The emission factors are based on the values from the most recent water analysis. Reporting: Reporting is done in accordance with the Title V requirements specified in Section A109.A and Section B111. Water analysis results will be included in the Semi-Annual Monitoring Report for any year in which the water sampling is conducted. Basin water sampling was in November and December of 2020.	

Deviations: Unit ID	Cause, Description of Deviation, and Corrective Action Taken or Tracking number	Start Date	End Date

P100-R2M1 - A1507 Evaporative Sprayers–Work Practice Standards

B. Maintenance and Repair Requirements

Requirement: Compliance with the allowable emission limits in Table 106.A shall be demonstrated by properly maintaining and repairing the units.

Monitoring: Maintenance and repair shall meet the minimum manufacturer's or permittee's recommended maintenance schedule. Activities that involve maintenance, adjustment, replacement, or repair of functional components with the potential to affect the operation of an emission unit shall be documented as they occur.

Recordkeeping: The permittee shall maintain records in accordance with Section B109, including records of maintenance and repairs activities and a copy of the manufacturer's or permittee's recommended maintenance schedule.

Reporting: The permittee shall maintain records in accordance with Section B109, including records of maintenance and repairs activities and a copy of the manufacturer's or permittee's recommended maintenance schedule.

☒ **Yes** ☐ **No**

☐ **N/A**

1. Provide *Method(s) or other information or other facts used to determine the compliance status* in the "Methods:" row beneath each permit condition. 2. If you answered *No* to question 3, list *all* deviations in the *Deviations* section. For *all* Deviations that *produced* excess emissions, provide *only* **a)** the AQBCR EER Tracking Number. For *all* Deviations that *did not produce* excess emissions, provide **a)** The Unit ID, **b)** The Cause of and a Description of the Deviation, **c)** the Corrective Action, and **d)** the Start & End Dates of the deviation. Please indicate in **b)**, your *Description*, whether each deviation has been previously reported to NMED.	3. Was this facility *continuously* in compliance with *all* requirements of this condition during the reporting period?

Methods: Requirement: Compliance with the allowable emissions limits is demonstrated by properly maintaining and repairing the units.

Monitoring: Equipment maintenance and repair are conducted in accordance with the manufacturer's recommended schedule and LANL procedures, and documented in Table 106.A.

Recordkeeping/Reporting: Records are maintained in accordance with Section B109. Maintenance and repair records are kept on-site, and include maintenance and repairs activities, and the maintenance schedule.

Deviations: Unit ID	Cause, Description of Deviation, and Corrective Action Taken or Tracking number	Start Date	End Date

P100-R2M4 - A1507 Evaporative Sprayers–HAPs Calculations, Maintenance, and Repair

A. HAPs Calculations (Evaporative Sprayers)

Requirement: Compliance with the facility-wide allowable emission limits in Table 106.B (P100-R2M1) shall be demonstrated by calculating the annual total HAPs emissions in tons per year. The emissions shall be calculated based on the most recent water analysis and hours of operation for the evaporative sprayers.

Monitoring: The permittee shall conduct an analysis of the basin water, including analytical results (water concentrations) for all HAPs and New Mexico TAPs, at the Sanitary Effluent Reclamation Facility (SERF) every two years beginning no later than calendar year 2018. The permittee shall monitor the hours of operation for each sprayer.

Recordkeeping: The permittee shall record a monthly rolling, 12-month total of HAPs emissions based on the sum of calculated actual emissions from all the evaporative sprayers. The emission factors for the HAPs shall be based on the values from the most recent water analysis.

Reporting: The permittee shall submit reports according to Section A109 and in accordance with Section B111 (P100-R2M1). An electronic copy of the required water analysis including analytical results (water concentrations) for all HAPs, TAPs, and the total dissolved solids (TDS) shall be sent to AQB with the Semi-annual Monitoring Report specified in Condition A109.A (P100-R2M1) for any year in which the water sampling is conducted.

☒ **Yes** ☐ **No**

☐ **N/A**

Methods: Requirement: The facility demonstrates compliance with the allowable emissions limits in Table 106.B by calculating the annual total HAP emissions in tons per year. The most recent water analysis results and hours of operation are used to calculate the emissions.

Monitoring: The facility conducts analysis of the basin water for HAPs and TAPs every two years effective 2018. Basin water sampling was conducted in November and December of 2020. The hours of operation are monitored and tabulated.

Recordkeeping: Records are kept on-site and include the monthly rolling and 12-month total of HAPs emissions based on the sum of emissions from all the evaporative sprayers. The emission factors are based on the values from the most recent water analysis.

Reporting: Reporting is done in accordance with the Title V requirements specified in Section A109.A and Section B111. Water analysis results will be included in the Semi-Annual Monitoring Report for any year in which the water sampling is conducted. Basin water sampling was in November and December of 2020.

Deviations: Unit ID	Cause, Description of Deviation, and Corrective Action Taken or Tracking number	Start Date	End Date

1. Provide *Method(s) or other information or other facts used to determine the compliance status* in the "Methods:" row beneath each permit condition. 2. If you answered *No* to question 3, list *all* deviations in the *Deviations* section. For *all* Deviations that *produced* excess emissions, provide *only* **a)** the AQBCR EER Tracking Number. For *all* Deviations that *did not produce* excess emissions, provide **a)** The Unit ID, **b)** The Cause of and a Description of the Deviation, **c)** the Corrective Action, and **d)** the Start & End Dates of the deviation. Please indicate in **b)**, your *Description*, whether each deviation has been previously reported to NMED.	3. Was this facility *continuously* in compliance with *all* requirements of this condition during the reporting period?

P100-R2M4 - A1507 Evaporative Sprayers–HAPs Calculations, Maintenance, and Repair

B. Maintenance and Repair Requirements

Requirement: Compliance with the facility-wide allowable emission limits in Table 106.B (P100-R2M1) shall be demonstrated by properly maintaining and repairing the units.

Monitoring: Maintenance and repair shall meet the minimum manufacturer's or permittee's recommended maintenance schedule. Activities that involve maintenance, adjustment, replacement, or repair of functional components with the potential to affect the operation of an emission unit shall be documented as they occur.

Recordkeeping: The permittee shall maintain records in accordance with Section B109 (P100-R2M1), including records of maintenance and repairs activities and a copy of the manufacturer's or permittee's recommended maintenance schedule.

Reporting: The permittee shall maintain records in accordance with Section B109 (P100-R2M1), including records of maintenance and repairs activities and a copy of the manufacturer's or permittee's recommended maintenance schedule.

☒ **Yes** ☐ **No**

☐ **N/A**

Methods: Requirement: Compliance with the allowable emissions limits is demonstrated by properly maintaining and repairing the units.

Monitoring: Equipment maintenance and repair are conducted in accordance with the manufacturer's recommended schedule and LANL procedures, and documented in Table 106.A.

Recordkeeping/Reporting: Records are maintained in accordance with Section B109. Maintenance and repair records are kept on-site, and include maintenance and repairs activities, and the maintenance schedule.

Deviations: Unit ID	Cause, Description of Deviation, and Corrective Action Taken or Tracking number	Start Date	End Date

PART B General Conditions

1. Have these General Conditions been met during this reporting period? ***Check only one box per subject heading.*** ***Explain answers in remarks row under subject heading.***	2. Was this facility *continuously* in compliance with this requirement during the reporting period?
B101 Legal	☒ **Yes** ☐ **No** ☐ **N/A** – *Explain Below*
REMARKS: This compliance certification covers Title V Operating Permit P100-R2M4 for the time period January 1 - December 31, 2021. During 2021, LANL provided all compliance related documentation requested by NMED AQB and those required by construction and operating permits. There was no emissions trading at this facility during this certification period. There were no excess emissions during this certification period. All required reports and compliance certifications were certified by the Responsible Official.	
B102 Authority	☒ **Yes** ☐ **No** ☐ **N/A** – *Explain Below*
REMARKS: No remarks for this section.	
B103 Annual Fee	☒ **Yes** ☐ **No** ☐ **N/A** – *Explain Below*
REMARKS: Title V fees for 2020 were submitted to the NMED AQB on April 19, 2021.	
B104 Appeal Procedures	☒ **Yes** ☐ **No** ☐ **N/A** – *Explain Below*
REMARKS: The appeal procedures in Section B104 were not applicable in this certification period.	
B105 Submittal of Reports and Certifications	☒ **Yes** ☐ **No** ☐ **N/A** – *Explain Below*
REMARKS: B105.A. An annual emission stack test for the TA-03 combustion turbine was conducted on December 8, 2021; the test results demonstrated that the actual emissions were less than the allowable emissions. B105.B. There were no excess emissions during this certification period. LANL submitted a letter to NMED AQB on February 3, 2021 stating that there were no excess emissions in 2020. B105.C and D. All required Compliance Certifications and Semi-Annual Emissions and Monitoring Reports were submitted to NMED and EPA on time as required.	
B106 NSPS and/or MACT Startup, Shutdown, and Malfunction Operations	☒ **Yes** ☐ **No** ☐ **N/A** – *Explain Below*
REMARKS: B106.A. LANL operates equipment subject to 40 CFR 60; P100-R2M1, P100-R2M2, P100-R2M3, and P100-R2M4 require no continuous emissions monitoring device. B106.B. There were no excess emissions during SSM during this certification period. B106.C. LANL does not have equipment that is subject to a MACT standard in 40 CFR 63.	
B107 Startup, Shutdown, and Maintenance Operations	☒ **Yes** ☐ **No** ☐ **N/A** – *Explain Below*
REMARKS: Per Permit Condition A107 - Allowable SSM emissions limits are not imposed at this time. All SSM emissions are within or less than allowable emission levels. LANL sources do not have increased emissions during routine or predictable startup, shutdown, or maintenance, which require a plan under 20.2.7.14.A. No permit limit or applicable threshold was exceeded during this certification period. Operating and maintenance procedures are in place to minimize emissions during SSM events.	

PART B General Conditions

B108 General Monitoring Requirements	☒ **Yes** ☐ **No** ☐ **N/A** – *Explain Below*

REMARKS: Sources applicable to B108 General Monitoring Requirements are the TA-03 combustion turbine, the asphalt plant, and applicable CI-RICE generators.

B108.B. An annual emission stack test for the TA-03 combustion turbine was conducted on December 8, 2021; the test results demonstrated that the actual emissions were less than the allowable emissions.

B108.C. & D. Opacity readings are taken at the asphalt plant monthly when the plant operates.

Opacity measurements were required for five generators in this certification period. Section B108.D(2) of the permit allows for reduced frequency of opacity monitoring, if the unit operates 25% (547.5 hours in a quarter) or less of a monitoring period (calendar quarter). After two successive periods without monitoring, monitoring is required during the next period, unless the unit has operated less than 10% (219 hours in a quarter) of the monitoring period. If the unit runs less than 10% that period is not considered as one of the two successive periods. No other applicable CI-RICE units operated more than 10% for the monitoring periods during this certification period, therefore no monitoring was required for generators other than the five that had measurements taken.

B109 General Recordkeeping Requirements	☒ **Yes** ☐ **No** ☐ **N/A** – *Explain Below*

REMARKS: General recordkeeping requirements are met as discussed below:

B109.A and B. Records are maintained for all required sampling activities and measured data. These records are available on-site. The primary measuring activities applicable to this section are the visible emissions evaluations and emissions stack testing.

B109.C. and D. No alternative operating scenarios or off permit changes occurred at this facility during this certification period.

B109.E. Per Permit Condition A 107 - Allowable SSM emission limits are not imposed at this time. All SSM emissions are at or below allowable routine operating emission limits. LANL sources do not have increased emissions during routine or predictable startup, shutdown, or maintenance, which require a plan under 20.2.7.14.A. No permit limit or applicable threshold was exceeded during this certification period. Operating procedures are in place to minimize emissions during SSM events. The facility does not have allowable malfunction emission limits.

B110 General Reporting Requirements	☒ **Yes** ☐ **No** ☐ **N/A** – *Explain Below*

REMARKS: B110.A. Monitoring reports are submitted on a six-month basis. LANL submitted the July 1–December 31, 2020 on February 10, 2021 and the January 1-June 30, 2021 on August 10, 2021. All non-NSPS and non-MACT monitoring and recordkeeping are maintained on-site and are summarized in the Semi-Annual Monitoring Reports.

B110.B. The monitoring reports submitted identify the subject equipment showing the emissions unit ID number defined in operating permit P100-R2M4.

B110.C. No deviations occurred during this certification period.

B110.D. No excess emissions occurred during this certification period.

B110.E. Emission tests and monitoring results are reported in pounds per hour and tons per year. Opacity readings are reported in percent.

B110.F. All notification requirements under NSR permits have been met.

B110.G. A summary of emissions stack test results is included in the semi-annual monitoring reports.

B110.H. The annual emission inventory required under 20.2.73 NMAC was submitted electronically via NMED's online reporting tool, AEIR, on March 22, 2021.

B110.I. There was no emissions trading during this certification period.

B111 General Testing Requirements	☒ **Yes** ☐ **No** ☐ **N/A** – *Explain Below*

PART B General Conditions

REMARKS: B111.A. EPA reference methods are used during all required compliance testing/sampling.

B111.B. An annual emission stack test for the TA-03 combustion turbine was conducted on December 8, 2021 using EPA Method 19; the test results demonstrated that the actual emissions were less than the allowable emissions.

B111.C. All test procedures are followed as specified. EPA reference methods were used to observe visible emissions from various sources at LANL. All testing was done following applicable EPA Methods and NMED Test Procedures.

B111.D Stack testing was required during this certification period. NMED was notified 30 days prior to the test date. The required test procedures were followed as specified. The Test Report will be included in the Semi-Annual Monitoring Report for this monitoring period.

B112 Compliance	☒ **Yes** ☐ **No** ☐ **N/A** – *Explain Below*

REMARKS: B112.A. All required records are maintained on-site and are available for review upon request. LANL cooperates with all Department inspections and provides access to facilities and copies of records as requested.

B112.B. Copies of the most recent permit(s) are kept at the facility and are available to the Department personnel for inspection upon request.

B112.C. Emissions and emission limits are monitored or calculated using the energy input of the unit with one hour averaging times, as specified.

B112.D. Compliance certification reports are completed and submitted to the Department and EPA as required. This compliance certification report meets this requirement.

B112.E. LANL makes every effort to assist NMED with any reasonable request to verify compliance with this permit. There was a NMED inspections on September 23, 2021 during this certification period.

B113 Permit Reopening and Revocation	☒ **Yes** ☐ **No** ☐ **N/A** – *Explain Below*

REMARKS: This Annual Compliance Certification report is certifying operation conducted under P100-R2M4 from January 1 - December 31, 2021.

B114 Emergencies	☒ **Yes** ☐ **No** ☐ **N/A** – *Explain Below*

REMARKS: No emergency situations occurred during this certification period that caused any impact to air emission sources under this permit.

B115 Stratospheric Ozone	☒ **Yes** ☐ **No** ☐ **N/A** – *Explain Below*

REMARKS: A stratospheric ozone protection program is in place. LANL, through our internal maintenance group, as well as other outside contractors, use appropriately certified technicians and certified recycling and recovery equipment. LANL refrigeration technicians, as well as other outside contractors, are trained and follow LANL procedures to ensure that required service practices found in 40 CFR 82, Subpart F, are followed.

B116 Acid Rain Sources	☒ **Yes** ☐ **No** ☐ **N/A** – *Explain Below*

REMARKS: This facility is not subject to the federal acid rain program under 40 CFR 72.

B117 Risk Management Plan	☒ **Yes** ☐ **No** ☐ **N/A** – *Explain Below*

REMARKS: This facility is not subject to the federal risk management program under 40 CFR 68. The volume of chemicals on-site at LANL is tracked through a centralized chemical management system, and specific queries are done monthly on the list of chemicals subject to Section 112r of 40 CFR 68 to ensure LANL does not approach or exceed threshold quantities that could trigger the requirement for a Risk Management Plan.

PART B General Conditions