

**Environment Safety & Health**

PO Box 1663, MS K491
Los Alamos, New Mexico 87545
(505)667-4218/Fax (505) 665-3811

Date: **MAR 24 2015**
Symbol: ADESH-15-050
LA-UR: 15-21792

Locates Action No.: N/A

Compliance Reporting Manager
Compliance & Enforcement Section
New Mexico Environment Department
Air Quality Bureau
1301 Siler Road, Building B
Santa Fe, New Mexico 87507-3113

Dear Compliance Reporting Manager:

SUBJECT: Title V Semi-Annual Emissions Report for Permit P100-R1-M3, July 1, 2014 – December 31, 2014 AI No. 856 – Los Alamos National Laboratory (LANL)

Enclosed is Los Alamos National Laboratory's (LANL) Semi-Annual Emissions report for the period July 1, 2014 through December 31, 2014. This report is required by permit condition A109 B and is submitted within 90 days from the end of the reporting period as required by that condition.

The semi-annual emissions report includes actual emissions from permitted sources included in LANL's Operating Permit. Emissions are also reported from insignificant boiler and generator sources. These sources are included to demonstrate that LANL has not exceeded Prevention of Significant Deterioration (PSD) applicability thresholds. In this report, actual emissions are listed along with the emission limits for ease in comparing and verifying compliance. No annual emission limits were exceeded during this reporting period.

Should you have any questions or comments regarding the information provided in this report, please contact Steven L. Story at (505) 665-2169 or story@lanl.gov.

Sincerely,

Michael T. Brandt, DrPH, CIH
Associate Director
Environment, Safety & Health

MTB:WW/lm

Enclosure: 1. Title V Semi-Annual Emissions Report for Permit P100-R1-M3
July 1, 2014 – December 31, 2014

Cy: Hai Shen, NA-LA, (E-File)
Kirsten Laskey, NA-LA, (E-File)
Michael A. Lansing, PADOPS, (E-File)
Amy E. De Palma, PADOPS, (E-File)
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Alison M. Dorries, ENV-DO, (E-File)
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New Mexico Environment Department
Air Quality Bureau
Compliance and Enforcement Section
1301 Siler Road Building B
Santa Fe, NM 87507
Phone (505) 476-4300 Fax (505) 476-4375



Version 07.03.08

NMED USE ONLY	
DTS	
TEMPO	

REPORTING SUBMITTAL FORM

NMED USE ONLY	
Staff	
Admin	

PLEASE NOTE: ® - Indicates required field

SECTION I - GENERAL COMPANY AND FACILITY INFORMATION

A. ® Company Name: U.S. Department of Energy		D. ® Facility Name: Los Alamos National Laboratory				
B.1 ® Company Address: P.O. Box 1663 MS J978		E.1 ® Facility Address: Same as Company				
B.2 ® City: Los Alamos	B.3 ® State: NM	B.4 ® Zip: 8 7 5 4 5	E.2 ® City:	E.3 ® State:	E.4 ® Zip:	
C.1 ® Company Environmental Contact: Tony Grieggs	C.2 ® Title: CP Group Leader	F.1 ® Facility Contact: Steve Story	F.2 ® Title: Air Compliance Team Leader			
C.3 ® Phone Number: 505-665-0451	C.4 ® Fax Number: 505-665-8858	F.3 ® Phone Number: 505-665-2169	F.4 ® Fax Number: 505-665-8858			
C.5 ® Email Address: grieggst@lanl.gov		F.5 ® Email Address: story@lanl.gov				
G. Responsible Official: (Title V only): Michael T. Brandt		H. Title: Associate Director ES&H		I. Phone Number: 505-667-4218		J. Fax Number: 505-665-3811
K. ® AI Number: 856	L. Title V Permit Number: P100-R1-M3	M. Title V Permit Issue Date: 4/26/2013	N. NSR Permit Number: 2195	O. NSR Permit Issue Date: Various		
P. Reporting Period: From: 7/1/2014 To: 12/31/2014		OR	Q. Proposed Test Date:	OR	R. Actual Test Date:	

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

A. <input type="checkbox"/>	Title V Annual Compliance Certification	Permit Condition(s):	Description:	
B. <input checked="" type="checkbox"/>	Title V Semi-annual Monitoring Report	Permit Condition(s): Condition A109	Description: Title V Semi-Annual Emissions Report July - December 2014	
C. <input type="checkbox"/>	NSPS Requirement (40CFR60)	Regulation:	Section(s):	Description:
D. <input type="checkbox"/>	MACT Requirement (40CFR63)	Regulation:	Section(s):	Description:
E. <input type="checkbox"/>	NMAC Requirement (20.2.xx) or NESHAP Requirement (40CFR61)	Regulation:	Section(s):	Description:
F. <input type="checkbox"/>	Permit or Notice of Intent (NOI) Requirement	Permit No. <input type="checkbox"/> or NOI No. <input type="checkbox"/>	Condition(s):	Description:
G. <input type="checkbox"/>	Requirement of an Enforcement Action	NOV No. <input type="checkbox"/> or SFO No. <input type="checkbox"/> or CD No. <input type="checkbox"/> or Other <input type="checkbox"/>	Section(s):	Description:

SECTION III - PERIODIC EMISSIONS TEST NOTIFICATIONS, TEST PROTOCOLS AND TEST REPORTS (if applicable)

T. <input type="checkbox"/>	A. Test Report <input type="checkbox"/> CMT: _____		B. Test Protocol <input type="checkbox"/>	C. Notification <input type="checkbox"/> CMT: _____	Description: (Emission Units to be Tested)
	D. Test (EPA Methods) <input type="checkbox"/>	E. Test (EPA Methods) <input type="checkbox"/>	F. RATA Test <input type="checkbox"/>	G. Opacity Test <input type="checkbox"/>	

SECTION IV - CERTIFICATION

After reasonable inquiry, I <u>Michael T. Brandt</u> certify that the information in this submittal is true, accurate and complete. (name of reporting official)				
® Signature of Reporting Official: 		® Title: Associate Director ES&H	® Date: 3-23-15	® Responsible Official for Title V? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No

Reviewed By:

Date Reviewed:

Title V Semi-Annual Emission Report for Permit P100-R1-M3

July 1, 2014 – December 31, 2014

Identifying Information

Source Name: Los Alamos National Laboratory County: Los Alamos

Source Address:

City: Los Alamos State: NM Zip Code: 87545

Responsible Official: Michael T. Brandt Ph No. (505) 667-4218 Fax No. (505) 665-3811

Technical Contact: Steven L. Story Ph No. (505) 665-2169 Fax No. (505) 665-8858

Principal Company Product or Business: National Security and Nuclear Weapons Research Primary SIC Code: 8733

Permit No. P100-R1-M3 {IDEA/Tempo ID No. 856} Permit Issued Date: April 26, 2013

Certification of Truth, Accuracy, and Completeness

I, Michael T. Brandt certify that, based on information and belief formed after reasonable inquiry, the statements and information in the attached semi-annual emission report are true, accurate, and complete.

Signature



Date:

3/23/15

Title: Associate Director Environmental, Safety, and Health

ENCLOSURE 1

**Title V Semi-Annual Emissions Report for Permit
P100-R1-M3**

July 1, 2014 – December 31, 2014

ADESH-15-050

LA-UR-15-21792

Date: MAR 24 2015

**Title V Semi-Annual Emissions Report for Permit P100-R1-M3
July 1, 2014 - December 31, 2014**

Emission Reporting Requirements

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.

- 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 criteria pollutants NO_x, CO, SO₂, VOC, TSP, PM₁₀, and PM_{2.5} 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.

Specific Emissions Reports:

A600 Asphalt Production

A602 Emission Limits - Asphalt Production

Unit No.	Nox tpy	SO ₂ tpy	PM tpy	CO tpy	VOC tpy
TA-60-BDM	95.0	50.0	95.0	95.0	95.0

Reporting Requirement

A607 F The permittee shall submit reports described in Section A109 and in accordance with B110.

A109 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 criteria pollutants NO_x, CO, SO₂, VOC, TSP, PM₁₀, and PM_{2.5} 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.

Has this reporting requirement been met during this reporting period with a separate reporting submittal? Answer Yes or No below.

☐

Yes

Date report submitted:

Tracking Number:

☒

No

Provide comments and identify any supporting documentation as an attachment.

Comments:

Asphalt Plant TA-60-BDM	January - June Emissions (tons)	July - December Emissions (tons)	Annual Emissions (tons)	Permit Limits (Condition A602 A) (tons per year)
NO _x	0.002	0.001	0.003	95.0
SO ₂	0.001	0.000	0.001	50.0
PM	0.001	0.001	0.002	95.0
CO	0.075	0.042	0.117	95.0
VOC	0.001	0.001	0.002	95.0
HAPs	0.001	0.001	0.002	No Source Permit Limit

A700 Beryllium Activities

A702 Emission Limits - Beryllium Activities

Source	Beryllium Particulate Matter	Aluminum Particulate Matter
Sigma Facility TA-3-66	10 gm/24 hr	N/A
Beryllium Technology Facility TA-3-141	3.5 gm/yr	N/A
Target Fabrication Facility TA-35-213	0.36 gm/yr	N/A
Plutonium Facility TA-55-PF-4 Machining Operation	2.99 gm/yr	2.99 gm/yr
Plutonium Facility TA-55-PF-4 Foundry Operation	8.73X10 ⁻⁰⁴ gm/yr	8.73X10 ⁻⁰⁴ gm/yr

Reporting Requirement

A707 D The permittee shall submit reports described in Section A109 and in accordance with B110.

A109 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 criteria 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.

Has this reporting requirement been met during this reporting period with a separate reporting submittal? Answer Yes or No below.

☐

Yes

Date report submitted:

Tracking Number:

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No Provide comments and identify any supporting documentation as an attachment.

Comments: Continued on the next page

A700 Beryllium Activities - continued

Comments:

Source	Pollutant	January - June Emissions	July - December Emissions	Annual Emissions	Permit Limits (Condition A702 A)
Beryllium Test Facility TA-3-141 ⁽¹⁾	Beryllium (grams)	< 0.0033	< 0.0033	< 0.007	3.5 gm/yr
Target Fabrication Facility TA-35-213 ⁽²⁾	Beryllium (grams)	< 0.00944	< 0.009	< 0.018	0.36 gm/yr
Plutonium Facility TA-55-PF4 Machining Operation ⁽³⁾	Beryllium (grams)	< 1.495	< 1.41	< 2.91	2.99 gm/yr
	Aluminum (grams)	< 1.495	< 1.41	< 2.91	2.99 gm/yr
Plutonium Facility TA-55-PF4 Foundry Operation ⁽⁴⁾	Beryllium (grams)	0	0	0.00	8.73 x 10 ⁻⁴ gm/yr
	Aluminum (grams)	0	0	0.00	8.73 x 10 ⁻⁴ gm/yr
Beryllium Total ⁽⁵⁾ (tons) =		< 1.66E-06	< 1.57E-06	< 3.23E-06	
Aluminum Total (tons) =		< 1.65E-06	< 1.55E-06	< 3.30E-06	

Notes: (1) Emission values shown for the Beryllium Test Facility are from actual stack emission measurements which are submitted to NMED quarterly. (2) Emissions for the Target Fabrication Facility are from initial compliance testing of that source and calculated based on a conservative assumption of 8 hour work days. Log books were checked to verify that work days were much less than 8 hours. (3) Emissions for the Plutonium Facility are calculated based on permitted throughputs. Log books were checked to verify that throughputs were much less than permitted values. (4) The Plutonium Facility foundry operations did not operate during 2014. (5) The Sigma Facility listed in section A700 of the permit does not require reporting in the Semi-Annual Emissions Report.

A800 External Combustion

A802 Emission Limits - External Combustion

Unit No.	NO _x tpy	CO tpy	VOC tpy	SO ₂ tpy	TSP tpy	PM ₁₀ tpy
All Boilers	80.0	80.0	50.0	50.0	50.0	50.0

Unit No.	NO _x tpy	CO tpy	SO ₂ tpy	TSP tpy	PM ₁₀ tpy	PM _{2.5} tpy
CMRR-BHW-1 (gas)	2.9	4.8	0.3	0.4	0.4	0.4
CMRR-BHW-2 (gas)	2.9	4.8	0.3	0.4	0.4	0.4
CMRR-BHW-3 (gas)	2.9	4.8	0.3	0.4	0.4	0.4
CMRR-BHW-4 (gas)	2.9	4.8	0.3	0.4	0.4	0.4
CMRR Boilers (oil)	2.9	0.9	10.4	0.5	0.3	0.3
CMRR Boilers Total	14.5	20.1	11.6	2.1	1.9	1.9

Reporting Requirement

A807 B The permittee shall submit reports described in Section A109 and in accordance with B110.

A109 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 criteria pollutants NO_x, CO, SO₂, VOC, TSP, PM₁₀, and PM_{2.5} 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.

Has this reporting requirement been met during this reporting period with a separate reporting submittal? Answer Yes or No below.

☐

Yes

Date report submitted:

Tracking Number:

☒

No Provide comments and identify any supporting documentation as an attachment.

Comments:

Boilers	January - June Emissions (tons)	July - December Emissions (tons)	Annual Emissions (tons)	Permit Limits (Condition A802 A) (tons per year)
NO _x	12.52	9.31	21.83	80
SO ₂	0.08	0.06	0.14	50
TSP	1.01	0.75	1.76	50
PM-10	1.01	0.75	1.76	50
CO	10.07	7.41	17.48	80
VOCs	0.72	0.53	1.25	50
HAPs	0.24	0.18	0.42	No Source Limit

Note: The emissions shown in this table includes all exempt, non-exempt, metered, and non-metered boilers at LANL except for the TA-3-22 Power Plant boilers. The Power Plant boilers can be found under Section A1300 of this report.

Continued on the next page

A800 External Combustion - continued

CMRR-BHW-1 (Gas)	January - June Emissions (tons)	July - December Emissions (tons)	Annual Emissions (tons)	Permit Limits (Condition A802 B) (tons per year)
NOx	0.011	0.006	0.017	2.9
SO ₂	0.000	0.000	0.000	0.3
TSP	0.002	0.001	0.003	0.4
PM-10	0.002	0.001	0.003	0.4
PM-2.5	0.002	0.001	0.003	0.4
CO	0.014	0.008	0.022	4.8
VOCs	0.009	0.006	0.015	No Source Limit
HAPs	0.001	0.000	0.001	No Source Limit

CMRR-BHW-2 (Gas)	January - June Emissions (tons)	July - December Emissions (tons)	Annual Emissions (tons)	Permit Limits (Condition A802 B) (tons per year)
NOx	0.011	0.006	0.017	2.9
SO ₂	0.000	0.000	0.000	0.3
TSP	0.002	0.001	0.003	0.4
PM-10	0.002	0.001	0.003	0.4
PM-2.5	0.002	0.001	0.003	0.4
CO	0.014	0.008	0.022	4.8
VOCs	0.009	0.006	0.015	No Source Limit
HAPs	0.001	0.000	0.001	No Source Limit

CMRR-BHW-3 (Gas)	January - June Emissions (tons)	July - December Emissions (tons)	Annual Emissions (tons)	Permit Limits (Condition A802 B) (tons per year)
NOx	0.011	0.006	0.017	2.9
SO ₂	0.000	0.000	0.000	0.3
TSP	0.002	0.001	0.003	0.4
PM-10	0.002	0.001	0.003	0.4
PM-2.5	0.002	0.001	0.003	0.4
CO	0.014	0.008	0.022	4.8
VOCs	0.009	0.006	0.015	No Source Limit
HAPs	0.001	0.000	0.001	No Source Limit

CMRR-BHW-4 (Gas)	January - June Emissions (tons)	July - December Emissions (tons)	Annual Emissions (tons)	Permit Limits (Condition A802 B) (tons per year)
NOx	0.000	0.000	0.000	2.9
SO ₂	0.000	0.000	0.000	0.3
TSP	0.000	0.000	0.000	0.4
PM-10	0.000	0.000	0.000	0.4
PM-2.5	0.000	0.000	0.000	0.4
CO	0.000	0.000	0.000	4.8
VOCs	0.000	0.000	0.000	No Source Limit
HAPs	0.000	0.000	0.000	No Source Limit

Note: The CMRR-BHW-4 boiler has not been installed.

Continued on the next page.

A800 External Combustion - continued

CMRR Boilers Totals (Oil)	January - June Emissions (tons)	July - December Emissions (tons)	Annual Emissions (tons)	Permit Limits (Condition A802 B) (tons per year)
NOx	0.000	0.000	0.000	2.9
SO₂	0.000	0.000	0.000	10.4
TSP	0.000	0.000	0.000	0.5
PM-10	0.000	0.000	0.000	0.3
PM-2.5	0.000	0.000	0.000	0.3
CO	0.000	0.000	0.000	0.9
VOCs	0.000	0.000	0.000	No Source Limit
HAPs	0.000	0.000	0.000	No Source Limit

Note: The CMRR boilers did not operate on fuel oil during 2014.

CMRR Boilers Totals (Gas and Oil)	January - June Emissions (tons)	July - December Emissions (tons)	Annual Emissions (tons)	Permit Limits (Condition A802 B) (tons per year)
NOx	0.033	0.019	0.052	14.5
SO₂	0.001	0.000	0.001	11.6
TSP	0.005	0.003	0.008	2.1
PM-10	0.005	0.003	0.008	1.9
PM-2.5	0.005	0.003	0.008	1.9
CO	0.042	0.025	0.067	20.1
VOCs	0.028	0.017	0.045	No Source Limit
HAPs	0.002	0.001	0.003	No Source Limit

A900 Chemical Usage

A902 Emission Limits - Chemical Usage

Unit No.	VOC/HAPs tpy
LANL-FW-CHEM	-- ¹
CMRR-CHEM	3.75 ¹

¹ The VOC emissions from this source category are included in the facility-wide allowable emissions limit established in Table 106.B: 200 tpy VOC, 8.0 tpy per individual HAP, and 24.0 tpy of combined total HAPs. Any VHAPs that are also defined as a VOC shall be included in the VOC total.

Reporting Requirement

A907 A The permittee shall submit reports described in Section A109 and in accordance with B110. With respect to individual HAPs, reports shall include any HAP emitted in quantity greater than 0.5 tons per year.

A109 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 criteria 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.

Has this reporting requirement been met during this reporting period with a separate reporting submittal? Answer Yes or No below.

☐

Yes

Date report submitted:

Tracking Number:

☒

No Provide comments and identify any supporting documentation as an attachment.

Comments:

Chemical Usage LANL-FW-CHEM		January - June Emissions (tons)	July - December Emissions (tons)	Annual Emissions (tons)	Permit Limits (Condition A902 B)
VOCs		5.13	5.73	10.86	Source limits refer to facility-wide limits.
HAPs		2.86	2.20	5.06	
Individual HAPs greater than 0.5 tons	Hydrochloric Acid	0.99	0.42	1.41	
	Methylene Chloride	0.21	0.45	0.66	
	Methanol	0.43	0.12	0.55	
	Chlorine	0.31	0.24	0.55	

Chemical Usage CMRR-CHEM		January - June Emissions (tons)	July - December Emissions (tons)	Annual Emissions (tons)	Permit Limits (Condition A902 B)
HAPs		0.005	0.000	0.005	3.75
VOCs		0.0004	0.000	0.0004	3.75
TAPs		0.004	0.005	0.009	No Source Limit

A1000 Degreasers

A1002 Emission Limits - Degreasers

Unit No.	VOC/HAPs tpy
TA-55-DG-1	--

1 The VOC emissions from this source category are included in the facility-wide allowable emissions limit established in Table 106.B: 200 tpy VOC, 8.0 tpy per individual HAP, and 24.0 tpy of combined total HAPs. Any VHAPs that are also defined as a VOC shall be included in the VOC total.

Reporting Requirement

A1007 A The permittee shall submit reports described in Section A109 and in accordance with B110.

A109 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 criteria pollutants NO_x, CO, SO₂, VOC, TSP, PM₁₀, and PM_{2.5} 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.

Has this reporting requirement been met during this reporting period with a separate reporting submittal? Answer Yes or No below.

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Yes

Date report submitted:

Tracking Number:

☒

No Provide comments and identify any supporting documentation as an attachment.

Comments:

Degreaser TA-55-DG-1	January - June Emissions (tons)	July - December Emissions (tons)	Annual Emissions (tons)	Permit Limits (Condition A1002 A) (tons per year)
VOCs	0.005	0.000	0.005	Source limits refer to facility-wide limits.
HAPs	0.005	0.000	0.005	

A1100 Internal Combustion

A1102 Emission Limits - Internal Combustion

Unit No.	NO _x tpy	CO tpy	VOC tpy	SO ₂ tpy	TSP tpy	PM ₁₀ tpy
TA-33-G-1	18.1	15.2	0.3	2.5	0.6	0.6
TA-33-G-2	0.21	0.1	-- ¹	--	--	--
TA-33-G-3	0.21	0.1	-- ¹	--	--	--
TA-33-G-4	2.33	1.4	0.2	0.16	--	--

¹ The VOC emissions from this source category are included in the facility-wide allowable emissions limit established in condition 106.B: 200 tpy VOC, 8.0 tpy per individual HAP, and 24.0 tpy of combined total HAPs.

Reporting Requirement

A1107 A The permittee shall submit reports described in Section A109, report as required by 40 CFR 60, A and III and in accordance with B110.

Subparts

A109 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 criteria pollutants NO_x, CO, SO₂, VOC, TSP, PM₁₀, and PM_{2.5} 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.

Has this reporting requirement been met during this reporting period with a separate reporting submittal? Answer Yes or No below.

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Yes

Date report submitted:

Tracking Number:

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No Provide comments and identify any supporting documentation as an attachment.

Comments:

Generator TA-33-G-1P	January - June Emissions (tons)	July - December Emissions (tons)	Annual Emissions (tons)	Permit Limits (Condition A1102 A) (tons per year)
NO _x	0.040	0.000	0.040	18.1
SO ₂	0.001	0.000	0.001	2.5
TSP	0.001	0.000	0.001	0.6
PM ₁₀	0.001	0.000	0.001	0.6
CO	0.009	0.000	0.009	15.2
VOC	0.001	0.000	0.001	0.3
HAPs	5.94E-05	5.72E-05	1.17E-04	No Source Limit

Note: The TA-33-G-1 generator was replaced by the TA-33-G-1P generator in NSR Permit No. 2195F-R4, issued on 12/12/2013. The Title V permit has not been updated to reflect this change yet. The TA-33-G-1P generator only operated for 2.5 hours during 2014.

Generator TA-33-G-2	January - June Emissions (tons)	July - December Emissions (tons)	Annual Emissions (tons)	Permit Limits (Condition A1102 A) (tons per year)
NO _x	0.005	0.000	0.005	0.21
SO ₂	0.000	0.000	0.000	Not Required
TSP	0.000	0.000	0.000	Not Required
PM ₁₀	0.000	0.000	0.000	Not Required
CO	0.001	0.000	0.001	0.1
VOC	0.000	0.000	0.000	Not Required
HAPs	1.57E-06	1.49E-07	1.72E-06	No Source Limit

Note: The TA-33-G-2 generator only operated for 12.7 hours in 2014.

Continued on the next page.

A1100 Internal Combustion- continued

Generator TA-33-G-3	January - June Emissions (tons)	July - December Emissions (tons)	Annual Emissions (tons)	Permit Limits (Condition A1102 A) (tons per year)
NOx	0.006	0.001	0.007	0.21
SO ₂	0.000	0.000	0.000	Not Required
TSP	0.000	0.000	0.000	Not Required
PM ₁₀	0.000	0.000	0.000	Not Required
CO	0.001	0.000	0.001	0.1
VOC	0.000	0.000	0.000	Not Required
HAPs	1.92E-06	3.38E-07	2.26E-06	No Source Limit

Note: The TA-33-G-3 generator only operated for a 16.7 hours in 2014.

Generator TA-33-G-4	January - June Emissions (tons)	July - December Emissions (tons)	Annual Emissions (tons)	Permit Limits (Condition A1102 A) (tons per year)
NOx	0.052	0.038	0.090	2.33
SO ₂	0.004	0.003	0.007	0.16
TSP	0.004	0.003	0.007	Not Required
PM ₁₀	0.004	0.003	0.007	Not Required
CO	0.011	0.008	0.019	1.4
VOC	0.004	0.003	0.007	0.2
HAPs	1.67E-05	1.22E-05	2.89E-05	No Source Limit

Note: The TA-33-G-4 generator only operated for 19.0 hours in 2014.

Stationary Standby Generators	January - June Emissions (tons)	July - December Emissions (tons)	Annual Emissions (tons)	Permit Limits
NOx	1.49	1.95	3.44	No Source Specific Emission Limits for Standby Generators
SO ₂	0.06	0.08	0.14	
TSP	0.08	0.10	0.18	
PM ₁₀	0.08	0.10	0.18	
CO	0.34	0.44	0.78	
VOC	0.08	0.10	0.18	
HAPs	4.96E-04	5.70E-04	1.07E-03	

Note: Standby Generators are insignificant sources.

Generator CMRR-GEN-1	January - June Emissions (tons)	July - December Emissions (tons)	Annual Emissions (tons)	Permit Limits
NOx	0.326	0.314	0.641	No Source Specific Emission Limits for the CMRR Generators
SO ₂	0.006	0.005	0.011	
TSP	0.010	0.010	0.020	
PM ₁₀	0.010	0.010	0.020	
CO	0.071	0.069	0.140	
VOC	0.010	0.010	0.020	
HAPs	5.94E-05	5.72E-05	1.17E-04	

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A1100 Internal Combustion- continued

Generator CMRR-GEN-2	January - June Emissions (tons)	July - December Emissions (tons)	Annual Emissions (tons)	Permit Limits
NOx	0.223	0.091	0.314	No Source Specific Emission Limits for the CMRR Generators
SO ₂	0.004	0.002	0.006	
TSP	0.007	0.003	0.010	
PM ₁₀	0.007	0.003	0.010	
CO	0.049	0.020	0.069	
VOC	0.007	0.003	0.010	
HAPs	4.06E-05	1.66E-05	5.72E-05	

Generator CMRR-GEN-3	January - June Emissions (tons)	July - December Emissions (tons)	Annual Emissions (tons)	Permit Limits
NOx	0.012	0.024	0.036	No Source Specific Emission Limits for the CMRR Generators
SO ₂	0.000	0.000	0.000	
TSP	0.000	0.001	0.001	
PM ₁₀	0.000	0.001	0.001	
CO	0.003	0.005	0.008	
VOC	0.000	0.001	0.001	
HAPs	2.18E-06	4.36E-06	6.55E-06	

A1200 Data Disintegrator

A1202 Emission Limits - Data Disintegrator

Unit No.	TSP tpy	PM10 tpy
TA-52-11	9.9	9.9

Reporting Requirement

A1207 A The permittee shall submit reports described in Section A109 and in accordance with B110.

A109 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 criteria pollutants NO_x, CO, SO₂, VOC, TSP, PM₁₀, and PM_{2.5} 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.

Has this reporting requirement been met during this reporting period with a separate reporting submittal? Answer Yes or No below.

☐

Yes

Date report submitted:

Tracking Number:

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No Provide comments and identify any supporting documentation as an attachment.

Comments:

Data Disintegrator TA-52-11	January - June Emissions (tons)	July - December Emissions (tons)	Annual Emissions (tons)	Permit Limits (Condition A1202 A) (tons per year)
TSP	0.04	0.03	0.07	9.9
PM10	0.04	0.03	0.07	9.9

A1300 TA-3 Power Plant

A1302 Emission Limits - TA-3 Power Plant

All TA-3 Power Plant Boilers Combined (TA-33-1, TA-33-2, TA-33-3)

NOx tpy	CO tpy	VOC tpy	SOx tpy	TSP tpy	PM ₁₀ tpy	PM2.5 tpy
31.5	21.5	2.8	4.9	4.7	4.4	4.2

TA-3 Power Plant Turbine (TA-3-22-CT-1)

NOx tpy	CO tpy	VOC tpy	SOx tpy	TSP tpy	PM ₁₀ tpy	PM2.5 tpy
59.4	72.3	1.5	4.2	4.8	4.8	4.8

Reporting Requirement

A1307 A The permittee shall submit reports described in Section A109 and in accordance with B110.

A109 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 criteria 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.

Has this reporting requirement been met during this reporting period with a separate reporting submittal? Answer Yes or No below.

☐

Yes

Date report submitted:

Tracking Number:

No Provide comments and identify any supporting documentation as an attachment.

Comments:

Boilers TA-3-22-1, TA-3-22-2, TA-3-22-3	January - June Emissions (tons)	July - December Emissions (tons)	Annual Emissions (tons)	Permit Limit (Condition A1302 A) (tons per year)
NOx	6.31	4.69	11.00	31.5
SO ₂	0.07	0.05	0.12	4.9
TSP	0.83	0.61	1.44	4.7
PM ₁₀	0.83	0.61	1.44	4.4
PM _{2.5}	0.83	0.61	1.44	4.2
CO	4.35	3.24	7.59	21.5
VOC	0.60	0.44	1.04	2.8
HAPs	0.21	0.15	0.36	No Source Limit

Combustion Turbine TA-3-22 CT-1	January - June Emissions (tons)	July - December Emissions (tons)	Annual Emissions (tons)	Permit Limit (Condition A1302 A) (tons per year)
NOx	0.47	0.52	0.99	59.4
SOx	0.03	0.04	0.07	4.2
TSP	0.06	0.07	0.13	4.8
PM ₁₀	0.06	0.07	0.13	4.8
PM _{2.5}	0.06	0.07	0.13	4.8
CO	0.10	0.11	0.21	72.3
VOC	0.02	0.02	0.04	1.5
HAPs	1.28E-02	1.40E-02	2.68E-02	No Source Limit

A1400 Open Burning

A1402 Emission Limits - Open Burning

Unit No.	Individual HAP ¹ (tpy)	Total HAPs ¹ (tpy)
Facility-Wide Open Burning	8.0	24.0

¹ Individual and Total HAPs emitted by Open Burning are included in facility-wide HAP emission limits at Table 106.B.

Reporting Requirement

A1407 A The permittee shall submit reports described in Section A109 and in accordance with B110.

A109 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 criteria pollutants NO_x, CO, SO₂, VOC, TSP, PM₁₀, and PM_{2.5} 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.

Has this reporting requirement been met during this reporting period with a separate reporting submittal? Answer Yes or No below.

☐

Yes

Date report submitted:

Tracking Number:

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No

Provide comments and identify any supporting documentation as an attachment.

Comments:

No open burning activities took place during 2014.

A102 Facility Wide Emission Limits**Table 102.A: Total Potential Criteria Pollutant Emissions from Entire Facility**

Pollutant	Emissions (tons per year)
Nitrogen Oxides (NO _x)	245.0
Carbon Monoxide (CO)	225.0
Volatile Organic Carbons (VOC)	200.0
Sulfur Dioxide (SO ₂)	150.0
Total Particulate Matter (TSP)	120.0
Particulate Matter less than 10 microns (PM ₁₀)	120.0
Particulate Matter less than 2.5 microns (PM _{2.5})	120.0

Table 102.B: Total Potential HAPs that exceed 1.0 tons per year

Pollutant	Emissions (tons per year)
Individual HAP	8.0
Total HAPs	24.0

Reporting Requirement

A109 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 criteria pollutants NO_x, CO, SO₂, VOC, TSP, PM₁₀, and PM_{2.5} 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.

Has this reporting requirement been met during this reporting period with a separate reporting submittal? Answer Yes or No below.

☐

Yes

Date report submitted:

Tracking Number:

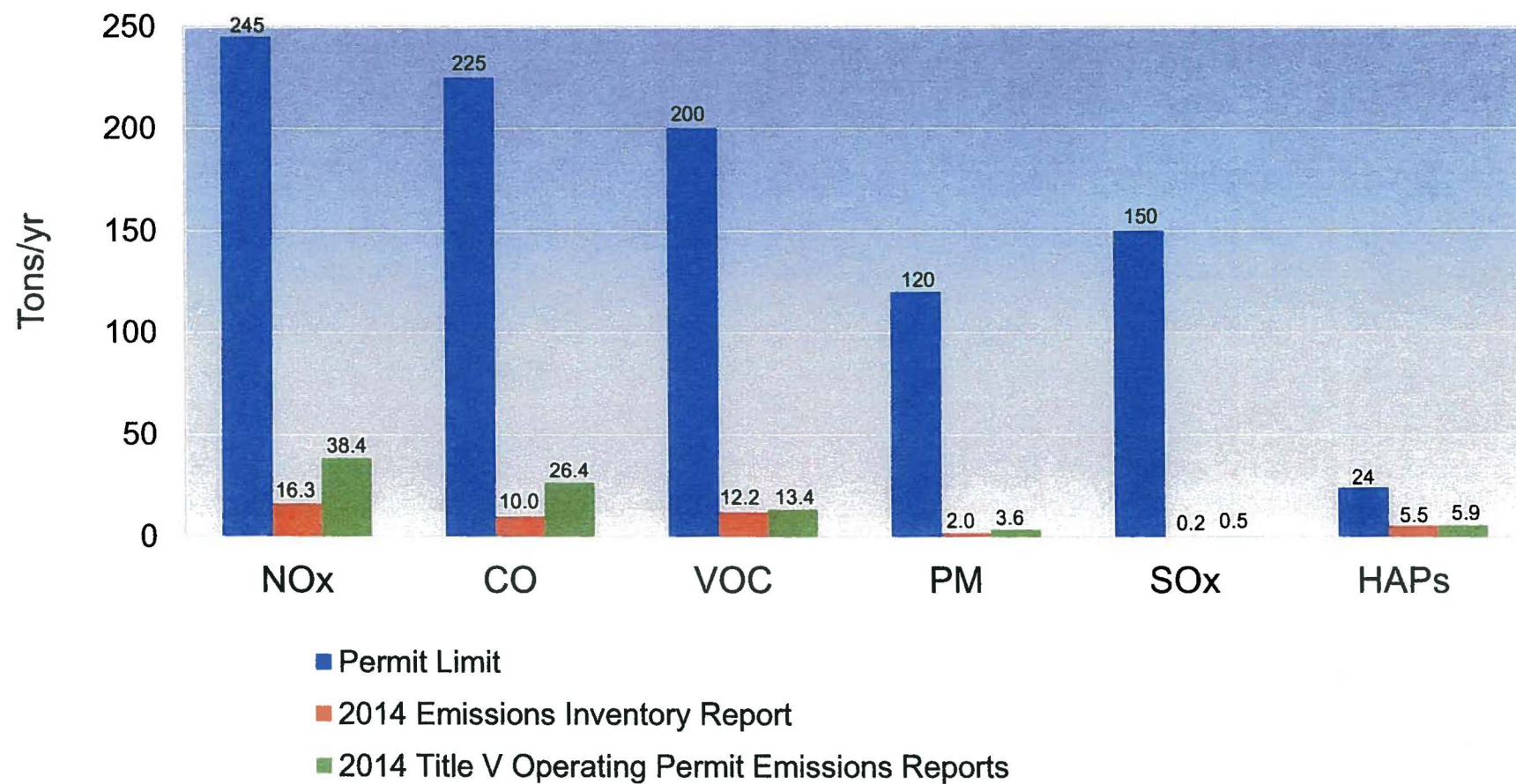
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No Provide comments and identify any supporting documentation as an attachment.

Comments:

Pollutant	January - June Emissions (tons)	July - December Emissions (tons)	2014 Annual Emissions (tons)	Facility Wide Permit Limits (Condition A102) (tons per year)
Nitrogen Oxides	21.5	16.9	38.4	245
Carbon Monoxide	15.1	11.3	26.4	225
Volatile Organic Carbons	6.6	6.8	13.4	200
Sulfur Dioxide	0.3	0.2	0.5	150
Total Particulate Matter	2.0	1.6	3.6	120
Particulate Matter less than 10 microns	2.0	1.6	3.6	120
Particulate Matter less than 2.5 microns	0.9	0.7	1.6	120
Hazardous Air Pollutants	3.3	2.5	5.9	24

Summary of 2014 LANL Air Emissions



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