

Associate Directorate for ESH&Q

P.O. Box 1663, MS K491

Los Alamos, New Mexico 87545

505-667-4218/Fax 505-665-3811

Date: March 22, 2010

Refer To: ESH&Q-10-008

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

**SUBJECT: IDEA ID NO. 856 – LOS ALAMOS NATIONAL LABORATORY (LANL)
OPERATING PERMIT NO: P100R1, SEMI-ANNUAL EMISSIONS
REPORT – JULY 1, 2009 TO DECEMBER 31, 2009**

Dear Compliance Reporting Manager:

Enclosed is Los Alamos National Laboratory's (LANL) Semi-Annual Emissions report for the period July 1, 2009 through December 31, 2009. This report is required by permit condition 4.1 and is submitted within 90 days from the end of the reporting period as required by permit condition 4.3.

The semi-annual emissions report includes actual emissions from permitted sources included in section 2.0 of 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 Steve Story at (505) 665-2169.

Sincerely,

J. Chris Cantwell

Associate Director, ESH&Q

LA-UR-10-01314

*Approved for public release;
distribution is unlimited.*

Title: Semi-Annual Emissions Report - Operating Permit Number
P100R1 July - December 2009

Author(s): Walt Whetham

Intended for: New Mexico Environmental Department



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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: Los Alamos National Security			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: 87545	E.2 ® City:	E.3 ® State:	E.4 ® Zip:
C.1 ® Company Environmental Contact: David Janecky		C.2 ® Title: EAQ Deputy Group Leader	F.1 ® Facility Contact: Steve Story		F.2 ® Title: Air Compliance Team Leader
C.3 ® Phone Number: 505-665-0253		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: janecky@lanl.gov			F.5 ® Email Address: story@lanl.gov		
G. Responsible Official: (Title V only): J. Chris Cantwell		H. Title: Associate Director ESH&Q	I. Phone Number: 505-606-2354		J. Fax Number: 505-665-3811
K. ® AI Number: 856	L. Title V Permit Number: P100R1	M. Title V Permit Issue Date: 8/7/2009	N. NSR Permit Number: 2195		O. NSR Permit Issue Date: Various
P. Reporting Period: From: 7/1/2009 To: 12/31/2009		OR	Q. Proposed Test Date:		OR R. Actual Test Date:

SECTION II - TYPE OF SUBMITTAL (check one that applies)			
A. ☐	Title V Annual Compliance Certification	Permit Condition(s):	Description:
B. ☒	Title V Semi-annual Monitoring Report	Permit Condition(s): Condition 4.1	Description: Title V Semi-Annual Emissions Report July - December 2009
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 - PERIODIC EMISSIONS TEST NOTIFICATIONS, TEST PROTOCOLS AND TEST REPORTS (if applicable)					
T. ☐	A. Test Report ☐ CMT: _____		B. Test Protocol ☐	C. Notification ☐ CMT: _____	Description: (Emission Units to be Tested)
	D. Test (EPA Methods) ☐	E. Test (EPA Methods) ☐	F. RATA Test ☐	G. Opacity Test ☐	

SECTION IV - CERTIFICATION			
After reasonable inquiry, I <u>J. Chris Cantwell</u> certify that the information in this submittal is true, accurate and complete. (name of reporting official)			
® Signature of Reporting Official: 		® Title: Associate Director ESH&Q	® Date: ® Responsible Official for Title V? ☒ Yes ☐ No

Reviewed By: _____

Date Reviewed: _____

Title V Operating Permit Semi-Annual Emission Report

July 1, 2009 – December 31, 2009

Identifying Information

Source Name: Los Alamos National Laboratory County: Los Alamos

Source Address:

City: Los Alamos State: NM Zip Code: 87545

Responsible Official: J. Chris Cantwell Ph No. (505) 606-2354 Fax No. (505) 665-3811

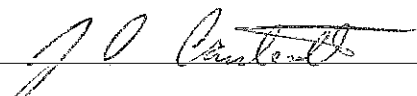
Technical Contact: Steven L. Story Ph No. (505) 665-2169 Fax No. (505) 665-8858

Principal Company Product or Business: National Security and Nuclear Weapons Research Primary SIC Code: 9711

Permit No. P100R1 {IDEA/Tempo ID No. 856} Permit Issued Date: August 7, 2009

Certification of Truth, Accuracy, and Completeness

I, J. Chris Cantwell 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: 3/22/10

Title: Associate Director Environmental, Safety, Health, and Quality

Enclosure

Los Alamos National Laboratory's
Title V Operating Permit
Emissions Report for the period
July 1 – December 31, 2009

Title V Semi-Annual Emissions Report for Permit P100R1
July 1, 2009 - December 31, 2009

Emission Reporting Requirements

4.0 Reporting

Conditions of 4.0 are pursuant to 20.2.70.302.E NMAC.

- 4.1 Reports of actual emissions from permitted sources in Section 2.0 shall be submitted on a 6 month basis. Reports shall not include emissions from insignificant activities. Emission estimates of criteria pollutants NO_x, CO, SO₂, PM and VOCs shall not include fugitive emissions. Emission estimates of HAPs shall include fugitive emissions. The reports shall include a comparison of actual emissions that occurred during the reporting period with the facility-wide allowable emission limits specified in Section 2.11 of this permit.

- 4.3 The report required by Condition 4.1 shall be submitted within 90 days from the end of the reporting period. The semiannual report required by Condition 4.2 shall be submitted within 45 days from the end of the reporting period. The reporting periods are January 1st to June 30th and July 1st to December 31st. This condition is pursuant to 20.2.70.302.E.1 NMAC.

Specific Emissions Reports:

2.1 Asphalt Production

2.1.2 Emission Limits

Emission Unit	Allowable Emission Limits				
	NO _x	SO ₂	PM	CO	VOC
TA-60-BDM	95.0 tpy	50.0 tpy	0.04 gr/dscf 33.8 lbs/hr 95.0 tpy	95.0 tpy	95.0 tpy

Reporting Requirement

2.1.6.1 Reports shall be submitted in accordance with conditions 4.1 and 4.2.⁽¹⁾

- 4.1 Reports of actual emissions from permitted sources in Section 2.0 shall be submitted on a 6 month basis. Reports shall not include emissions from insignificant activities. Emission estimates of criteria pollutants NO_x, CO, SO₂, PM and VOCs shall not include fugitive emissions. Emission estimates of HAPs shall include fugitive emissions. The reports shall include a comparison of actual emissions that occurred during the reporting period with the facility-wide allowable emission limits specified in Section 2.11 of this permit.

⁽¹⁾ Condition 4.2 refers to submitting a Semi-Annual Monitoring report which LANL submitted on February 10, 2010, Tracking Number SBR20100004.

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 2.1.2) (tons per year)
NO _x	0.017	0.012	0.029	95.0
SO ₂	0.002	0.000	0.002	50.0
PM	0.010	0.007	0.017	95.0
CO	0.605	0.409	1.014	95.0
VOC	0.004	0.000	0.004	95.0
HAPs	0.004	0.000	0.004	No Source Permit Limit

2.2 Beryllium Activities

2.2.2 Emission Limits

Source	Allowable Emission Limits	
	Beryllium	Aluminum
Sigma Facility TA-3-66	10 gm/24 hr	Not Applicable
Beryllium Technology Facility TA-3-141	0.35 gm/24 hr 3.5 gm/yr	Not Applicable

Source	Allowable Emission Limits	
	Beryllium	Aluminum
Target Fabrication Facility TA-35-213	1.8×10^{-4} gm/hr 0.36 gm/yr	Not Applicable
Plutonium Facility TA-55-PF4		
Machining Operation	0.12 gm/24 hr 2.99 gm/yr	0.12 gm/24 hr 2.99 gm/yr
Foundry Operation	3.49×10^{-5} gm/24 hr 8.73×10^{-4} gm/yr	3.49×10^{-5} gm/24 hr 8.73×10^{-4} gm/yr

Reporting Requirement

2.2.6 Reports shall be submitted in accordance with conditions 4.1 and 4.2.⁽¹⁾

4.1

Reports of actual emissions from permitted sources in Section 2.0 shall be submitted on a 6 month basis. Reports shall not include emissions from insignificant activities. Emission estimates of criteria pollutants NOx, CO, SO₂, PM and VOCs shall not include fugitive emissions. Emission estimates of HAPs shall include fugitive emissions. The reports shall include a comparison of actual emissions that occurred during the reporting period with the facility-wide allowable emission limits specified in Section 2.11 of this permit.

⁽¹⁾ Condition 4.2 refers to submitting a Semi-Annual Monitoring report which LANL submitted on February 10, 2010, Tracking Number SBR20100004.

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:

Continued on the next page

2.2 Beryllium Activities - continued

Comments:

Source	Pollutant	January - June Emissions	July - December Emissions	Annual Emissions	Permit Limits (Condition 2.2.2)
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	8.73×10^{-4} gm/yr
	Aluminum (grams)	0	0	0.00	8.73×10^{-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 in 2009. ⁽⁵⁾ The Sigma Facility listed in section 2.2 of the permit does not require reporting in the Semi-Annual Emissions Report.

2.3 Boilers and Heaters

2.3.2 Emission Limits

Source	Allowable Emission Limits				
	NO _x (tpy)	CO (tpy)	PM or PM ₁₀ (tpy)	SO ₂ (tpy)	VOC (tpy)
All Boilers and Heaters ¹	80	80	50	50	50

¹ Excludes TA-3-22 Power Plant addressed in Condition 2.9

Reporting Requirement

2.3.6.1 Reports shall be submitted in accordance with conditions 4.1 and 4.2.⁽¹⁾

4.1

Reports of actual emissions from permitted sources in Section 2.0 shall be submitted on a 6 month basis. Reports shall not include emissions from insignificant activities. Emission estimates of criteria pollutants NO_x, CO, SO₂, PM and VOCs shall not include fugitive emissions. Emission estimates of HAPs shall include fugitive emissions. The reports shall include a comparison of actual emissions that occurred during the reporting period with the facility-wide allowable emission limits specified in Section 2.11 of this permit.

⁽¹⁾ Condition 4.2 refers to submitting a Semi-Annual Monitoring report which LANL submitted on February 10, 2010, Tracking Number SBR20100004.

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 and Heaters	January - June Emissions (tons)	July - December Emissions (tons)	Annual Emissions (tons)	Permit Limits (Condition 2.3.2) (tons per year)
NO _x	14.00	11.49	25.49	80
SO ₂	0.09	0.07	0.16	50
PM	1.11	0.92	2.03	50
PM-10	1.11	0.92	2.03	50
CO	11.36	9.13	20.49	80
VOCs	0.78	0.64	1.42	50
HAPs	0.27	0.22	0.49	No Source Limit

Note: The emissions shown in this table include significant and insignificant sources. This section does not include the TA-3-22 Power Plant boilers. These can be found under Section 2.9 of this report.

2.4 Carpenter Shops

2.4.2 Emission Limits

Source	Allowable Emission Limits
	PM ₁₀ (tpy)
TA-15-563	2.81
TA-3-38	3.07

Reporting Requirement

2.4.6.1 Reports shall be submitted in accordance with conditions 4.1 and 4.2.⁽¹⁾

4.1

Reports of actual emissions from permitted sources in Section 2.0 shall be submitted on a 6 month basis. Reports shall not include emissions from insignificant activities. Emission estimates of criteria pollutants NOx, CO, SO₂, PM and VOCs shall not include fugitive emissions. Emission estimates of HAPs shall include fugitive emissions. The reports shall include a comparison of actual emissions that occurred during the reporting period with the facility-wide allowable emission limits specified in Section 2.11 of this permit.

(1) Condition 4.2 refers to submitting a Semi-Annual Monitoring report which LANL submitted on February 10, 2010, Tracking Number SBR20100004.

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:

Shop	Pollutant	January - June Emissions (tons)	July - December Emissions (tons)	Annual Emissions (tons)	Permit Limits (Condition 2.4.2) (tons per year)
TA-3-38	PM ₁₀	0.009	0.017	0.026	3.07
TA-15-563	PM ₁₀	0.013	0.012	0.025	2.81

2.5 Chemical Usage

2.5.2 Emission Limits

2.5.3.1 The contribution of VOC and/or HAPs emissions from chemical usage shall not cause the exceedence of the corresponding facility-wide limit listed below:

200 tons per year of facility-wide VOCs
8 tons per year of individual facility-wide HAP
24 tons per year of total facility-wide HAPs

Reporting Requirement

2.5.5.1 Reports shall be submitted in accordance with conditions 4.1 and 4.2.⁽¹⁾

4.1

Reports of actual emissions from permitted sources in Section 2.0 shall be submitted on a 6 month basis. Reports shall not include emissions from insignificant activities. Emission estimates of criteria pollutants NOx, CO, SO₂, PM and VOCs shall not include fugitive emissions. Emission estimates of HAPs shall include fugitive emissions. The reports shall include a comparison of actual emissions that occurred during the reporting period with the facility-wide allowable emission limits specified in Section 2.11 of this permit.

⁽¹⁾ Condition 4.2 refers to submitting a Semi-Annual Monitoring report which LANL submitted on February 10, 2010, Tracking Number SBR20100004.

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 2.5.3.1)
VOCs	3.9	6.5	10.4	Source limits refer to facility-wide limits.
HAPs	1.4	3.0	4.4	
Highest Individual HAP for the first 6 months of 2009 (Hydrochloric Acid)	0.5	0.1	0.6	
Highest Individual HAP for the second 6 months of 2009 (Cyanide Compounds)	0.0	1.2	1.2	

2.6 Degreasers

2.6.2 Emission Limits

2.6.2.1 The contribution of VOC and/or HAP emissions from chemical usage shall not cause the exceedence of the corresponding facility-wide limit listed below:

200 tons per year of facility-wide VOCs
8 tons per year of an individual facility-wide HAP
24 tons per year of total facility-wide HAPs

Reporting Requirement

2.6.6.3 Reports shall be submitted in accordance with conditions 4.1 and 4.2.⁽¹⁾

4.1

Reports of actual emissions from permitted sources in Section 2.0 shall be submitted on a 6 month basis. Reports shall not include emissions from insignificant activities. Emission estimates of criteria pollutants NOx, CO, SO₂, PM and VOCs shall not include fugitive emissions. Emission estimates of HAPs shall include fugitive emissions. The reports shall include a comparison of actual emissions that occurred during the reporting period with the facility-wide allowable emission limits specified in Section 2.11 of this permit.

⁽¹⁾ Condition 4.2 refers to submitting a Semi-Annual Monitoring report which LANL submitted on February 10, 2010, Tracking Number SBR20100004.

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:

Degreaser TA-55-DG-1	January - June Emissions (tons)	July - December Emissions (tons)	Annual Emissions (tons)	Permit Limits (Condition 2.6.2.1) (tons per year)
VOCs	0.007	0.008	0.015	Source limits refer to facility-wide limits. (See Facility Emissions Table on Page 1)
HAPs	0.007	0.008	0.015	

2.7 Internal Combustion Sources

2.7.2 Emission Limits

Source	Allowable Emission Limits											
	NO _x ¹		CO		VOC		SO _x ²		TSP		PM ₁₀	
	pph	tpy	pph	tpy	pph	tpy	pph	tpy	pph	tpy	pph	tpy
TA-33-G-1	40.3	18.1	33.7	15.2	0.7	0.3	5.5	2.5	1.4	0.6	1.4	0.6
TA-33-G-2	0.83	0.21	0.2	0.1	0.1	-- ³	--	--	--	--	--	--
TA-33-G-3	0.83	0.21	0.2	0.1	0.1	--	--	--	--	--	--	--
TA-33-G-4	9.33	2.33	5.7	1.4	0.75	0.2	0.62	0.16	--	--	--	--

1 Nitrogen dioxide emissions include all oxides of nitrogen expressed as NO₂.

2 Sulfur dioxide emissions include all oxides of sulfur expressed as SO₂.

3 "--" indicates the emission rate is less than 0.05 pph or 0.05 tpy and limits are not required for this permit.

Reporting Requirement

2.7.6.1 Reports shall be submitted in accordance with conditions 4.1 and 4.2.⁽¹⁾

4.1

Reports of actual emissions from permitted sources in Section 2.0 shall be submitted on a 6 month basis. Reports shall not include emissions from insignificant activities. Emission estimates of criteria pollutants NO_x, CO, SO₂, PM and VOCs shall not include fugitive emissions. Emission estimates of HAPs shall include fugitive emissions. The reports shall include a comparison of actual emissions that occurred during the reporting period with the facility-wide allowable emission limits specified in Section 2.11 of this permit.

⁽¹⁾ Condition 4.2 refers to submitting a Semi-Annual Monitoring report which LANL submitted on February 10, 2010, Tracking Number SBR20100004.

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:

Generator TA-33-G-1	January - June Emissions (tons)	July - December Emissions (tons)	Annual Emissions (tons)	Permit Limits (Condition 2.7.2) (tons per year)
NO _x	0.024	1.032	1.056	18.1
SO _x	0.004	0.153	0.157	2.5
TSP	0.001	0.034	0.035	0.6
PM ₁₀	0.001	0.034	0.035	0.6
CO	0.019	0.841	0.860	15.2
VOC	0.000	0.019	0.019	0.3
HAPs	5.12E-06	2.23E-04	2.28E-04	No Source Limit

Continued on the next page.

2.7 Internal Combustion Sources - continued

Comments:

Generator TA-33-G-2	January - June Emissions (tons)	July - December Emissions (tons)	Annual Emissions (tons)	Permit Limits (Condition 2.7.2) (tons per year)
NO _x	0.000	0.001	0.001	0.21
SO _x	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	0.000	0.000	0.000	0.1
VOC	0.000	0.000	0.000	Not Required
HAPs	0.00E+00	2.03E-07	2.03E-07	No Source Limit

Note: This generator did not run during the first six months of 2009 and only ran for 1.5 hours during the second six months.

Generator TA-33-G-3	January - June Emissions (tons)	July - December Emissions (tons)	Annual Emissions (tons)	Permit Limits (Condition 2.7.2) (tons per year)
NO _x	0.000	0.000	0.000	0.21
SO _x	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	0.000	0.000	0.000	0.1
VOC	0.000	0.000	0.000	Not Required
HAPs	2.70E-08	8.11E-08	1.08E-07	No Source Limit

Note: This generator ran less than an hour during 2009.

Generator TA-33-G-4	January - June Emissions (tons)	July - December Emissions (tons)	Annual Emissions (tons)	Permit Limits (Condition 2.7.2) (tons per year)
NO _x	0.274	0.061	0.335	2.33
SO _x	0.020	0.004	0.024	0.16
TSP	0.020	0.004	0.024	Not Required
PM ₁₀	0.020	0.004	0.024	Not Required
CO	0.059	0.013	0.072	1.4
VOC	0.020	0.004	0.024	0.2
HAPs	8.82E-05	1.98E-05	1.08E-04	No Source Limit

Continued on the next page.

2.7 Internal Combustion Sources - continued

Comments:

Stationary Standby Generators	January - June Emissions (tons)	July - December Emissions (tons)	Annual Emissions (tons)	Permit Limits
NOx	2.85	2.42	5.27	No Source Specific Emission Limits for Standby Generators
SOx	0.11	0.07	0.18	
TSP	0.13	0.10	0.23	
PM ₁₀	0.13	0.10	0.23	
CO	0.65	0.58	1.23	
VOC	0.13	0.10	0.23	
HAPs	0.001	0.001	0.002	

Note: Standby Generators are insignificant sources.

2.8 Data Disintegrator

2.8.2 Emission Limits

Source	Allowable Emission Limits			
	TSP (pph)	TSP (tpy)	PM10 (pph)	PM10 (tpy)
TA-52-11	2.3	9.9	2.3	9.9

PM10 and TSP emissions limits shown in above Table are after controls.

Reporting Requirement

2.8.6.1 Reports shall be submitted in accordance with conditions 4.1 and 4.2.⁽¹⁾

4.1

Reports of actual emissions from permitted sources in Section 2.0 shall be submitted on a 6 month basis. Reports shall not include emissions from insignificant activities. Emission estimates of criteria pollutants NOx, CO, SO₂, PM and VOCs shall not include fugitive emissions. Emission estimates of HAPs shall include fugitive emissions. The reports shall include a comparison of actual emissions that occurred during the reporting period with the facility-wide allowable emission limits specified in Section 2.11 of this permit.

⁽¹⁾ Condition 4.2 refers to submitting a Semi-Annual Monitoring report which LANL submitted on February 10, 2010, Tracking Number SBR20100004.

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:

Data Disintegrator TA-52-11	January - June Emissions (tons)	July - December Emissions (tons)	Annual Emissions (tons)	Permit Limits (Condition 2.8.2) (tons per year)
TSP	0.03	0.02	0.05	9.9
PM10	0.02	0.02	0.04	9.9

2.9 Power Plant at Technical Area 3 (TA-3-22)

2.9.2 Emission Limits

Source	Allowable Emission Limits											
	NO _x		CO		SO _x		TSP		PM ₁₀		VOC	
	Gas	Oil	Gas	Oil	Gas	Oil	Gas	Oil	Gas	Oil	Gas	Oil
TA-3-22-1 (lb/hr)	10.2	11.3	7.0	6.5	1.1	9.6	1.3	4.3	1.3	3.0	1.0	0.3
TA-3-22-2 (lb/hr)	10.2	11.3	7.0	6.5	1.1	9.6	1.3	4.3	1.3	3.0	1.0	0.3
TA-3-22-3 (lb/hr)	10.2	11.3	7.0	6.5	1.1	9.6	1.3	4.3	1.3	3.0	1.0	0.3
Boilers Individually (tpy)	35.9		N/A		N/A		N/A		N/A		N/A	
Boilers Combined ¹ (tpy)	60.2		41.3		7.9		8.4		8.2		5.6	

Source	Allowable Emission Limits											
	NO _x		CO		SO _x		TSP		PM ₁₀		VOC	
	Gas	Oil	Gas	Oil	Gas	Oil	Gas	Oil	Gas	Oil	Gas	Oil
TA-3-22 CT-1 (lb/hr)	23.8		170.9		1.4		1.6		1.6		1.0	
TA-3-22 CT-1 (tpy) ^{1,2}	33.2		19.8		1.9		2.3		2.3		-	
TA-3-22 CT-1 (ppm)	25 ppmv @ 15% O ₂		N/A		N/A		N/A		N/A		N/A	

¹ Annual emission limits are 12-month rolling totals. This is pursuant to NSR Permit 2195B-MIR2, Table 2.1, Note 7.

² “-” notation implies emission rates less than or equal to 0.5 tpy.

* N/A means not applicable.

Reporting Requirement

2.9.6.1 Reports shall be submitted in accordance with conditions 4.1 and 4.2.⁽¹⁾

4.1

Reports of actual emissions from permitted sources in Section 2.0 shall be submitted on a 6 month basis. Reports shall not include emissions from insignificant activities. Emission estimates of criteria pollutants NO_x, CO, SO₂, PM and VOCs shall not include fugitive emissions. Emission estimates of HAPs shall include fugitive emissions. The reports shall include a comparison of actual emissions that occurred during the reporting period with the facility-wide allowable emission limits specified in Section 2.11 of this permit.

⁽¹⁾ Condition 4.2 refers to submitting a Semi-Annual Monitoring report which LANL submitted on February 10, 2010, Tracking Number SBR20100004.

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:

Continued on the next page

2.9 Power Plant at Technical Area 3 (TA-3-22) - Continued

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 2.9.2) (tons per year)
NO _x	7.87	6.35	14.22	60.2
SO ₂	0.09	0.07	0.16	7.9
TSP	1.03	0.83	1.86	8.4
PM ₁₀	1.03	0.83	1.86	8.2
CO	5.42	4.38	9.80	41.3
VOC	0.75	0.60	1.35	5.6
HAPs	0.26	0.21	0.47	No Source Limit

Boiler	Pollutant	January - June Emissions (tons)	July - December Emissions (tons)	Annual Emissions (tons)	Permit Limit (Condition 2.9.2) (tons per year)
TA-3-22-1	NO _x	3.50	2.75	6.25	35.9
TA-3-22-2	NO _x	4.07	0.06	4.13	35.9
TA-3-22-3	NO _x	0.30	3.54	3.84	35.9

Combustion Turbine TA-3-22 CT-1	January - June Emissions (tons)	July - December Emissions (tons)	Annual Emissions (tons)	Permit Limit (Condition 2.9.2) (tons per year)
NO _x	0.054	0.298	0.35	33.2
SO ₂	0.004	0.021	0.02	1.9
TSP	0.007	0.040	0.05	2.3
PM ₁₀	0.007	0.040	0.05	2.3
CO	0.011	0.062	0.07	19.8
VOC	0.002	0.013	0.02	No TPY Limit
HAPs	1.46E-03	8.13E-03	0.02	No Source Limit

2.10 Open Burning

2.10.2 Emission Limits

2.10.2.1 The contribution of HAP emissions from open burning shall not cause the exceedance of the corresponding facility-wide limit listed below:

8 tons per year of an individual facility-wide HAP

24 tons per year of total facility-wide HAPs

Reporting Requirement

2.10.5.1 Reports shall be submitted in accordance with conditions 4.1.

4.1

Reports of actual emissions from permitted sources in Section 2.0 shall be submitted on a 6 month basis. Reports shall not include emissions from insignificant activities. Emission estimates of criteria pollutants NO_x, CO, SO₂, PM and VOCs shall not include fugitive emissions. Emission estimates of HAPs shall include fugitive emissions. The reports shall include a comparison of actual emissions that occurred during the reporting period with the facility-wide allowable emission limits specified in Section 2.11 of this permit.

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:

No open burning activities took place in 2009.

2.11 Facility Wide Emission Limits

2.11.1 Emission Limits

Total Allowable Criteria Pollutant and HAP Emission Limits

Pollutant	Emission Limit (tons per year)
Nitrogen Oxides (NO _x)	245
Carbon Monoxide (CO)	225
Volatile Organic Compounds (VOC's)	200
Sulfur Dioxide (SO ₂)	150
Particulate Matter (PM)	120
Hazardous Air Pollutants (HAPs)	24 combined / 8 individual

Reporting Requirement

4.1

Reports of actual emissions from permitted sources in Section 2.0 shall be submitted on a 6 month basis. Reports shall not include emissions from insignificant activities. Emission estimates of criteria pollutants NO_x, CO, SO₂, PM and VOCs shall not include fugitive emissions. Emission estimates of HAPs shall include fugitive emissions. The reports shall include a comparison of actual emissions that occurred during the reporting period with the facility-wide allowable emission limits specified in Section 2.11 of this permit.

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:

Pollutant	January - June Emissions (tons)	July - December Emissions (tons)	2009 Annual Emissions (tons)	Facility Wide Permit Limits (Condition 2.11.1) (tons per year)
Nitrogen Oxides	25.1	21.7	46.8	245
Sulfur Dioxide	0.3	0.4	0.7	150
Particulate Matter	2.4	2.0	4.4	120
Carbon Monoxide	18.1	15.4	33.5	225
Volatile Organic Compounds	5.6	7.9	13.5	200
Hazardous Air Pollutants	1.9	3.4	5.2	24 combined
Highest Individual HAP (Cyanide Compound)	0.0	1.2	1.2	8 individual