



Associate Directorate for ESH&Q
P.O. Box 1663, MS K491
Los Alamos, New Mexico 87545
505-667-4218/Fax 505-665-3811

Date: August 21, 2009
Refer To: ESH&Q-09-043

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



**IDEA ID NO. 856 – LOS ALAMOS NATIONAL LABORATORY (LANL)
OPERATING PERMIT NO: P100M2
SEMI-ANNUAL EMISSIONS REPORT – JANUARY 1, 2009 TO JUNE 30, 2009**

Dear Compliance Reporting Manager:

Enclosed is Los Alamos National Laboratory's (LANL) Semi-Annual Emissions report for the period January 1, 2009 through June 30, 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

www

Cy:

I.E. Richardson, III, , DIR, A100

M. Mallory, PADOPS, A102

S. Fong, DOE-LA-AO, A316

P. Wardwell, LC-ESH, A187

D. Wilburn, ENV-EAQ, J978

D. Janecky, ENV-EAQ, J978

S. Story, ENV-EAQ, J978

M. Stockton, ENV-EAQ, J978

W. Whetham, ENV-EAQ, J978

IRM-RM550, A150

ENV-EAQ Title V Emissions Report File

ENV-EAQ Admin File

ESH&Q File

Title V Operating Permit Semi-Annual Emission Report

January 1, 2009 – June 30, 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

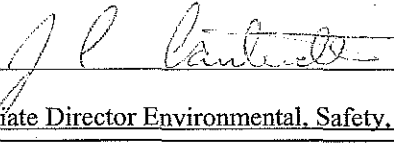
Principal Company Product or Business: National Security and Nuclear Weapons Research Primary SIC Code: 9711

Permit No. P100M2 {IDEA/Tempo ID No. 856} Permit Issued Date: July 16, 2007

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:

8/21/09

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

Enclosure

Los Alamos National Laboratory's
Title V Operating Permit
Emissions Report for the period
January 1, 2009 – June 30, 2009

Title V Semi-Annual Emission Report for Permit P100M2

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 2.10 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 | 1.0 tpy | 1.0 tpy | 0.04 gr/dscf 35.4 lbs/hr | 2.6 tpy | 1.0 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 2.10 of this permit.

⁽¹⁾ Condition 4.2 refers to submitting a Semi-Annual Monitoring report which LANL submitted on August 5, 2009, Tracking Number SBR20090006.

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 | | | 1.0 |
| SO ₂ | 0.002 | | | 1.0 |
| PM | 0.010 | | | *35.4 lb/hr |
| CO | 0.605 | | | 2.6 |
| VOC | 0.004 | | | 1.0 |
| HAPs | 0.004 | | | No Source Permit Limit |

Note: * The Asphalt Plant does not have an annual limit for PM. The hourly emissions were demonstrated during the initial source compliance test conducted on August 25th & 26th, 2005, and a retest of the plant conducted on May 18, 2009.

2.2 Beryllium Activities

2.2.2 Emission Limits

| Source | Allowable Emission Limits | |
|--|---|----------------|
| | Beryllium | Aluminum |
| Chemistry and Metallurgy Research Facility TA-3-29 | 10 gm/24 hr | Not Applicable |
| Sigma Facility TA-3-66 | 10 gm/24 hr | Not Applicable |
| Beryllium Test Facility TA-3-141 | 0.35 gm/24 hr 3.5 gm/yr | Not Applicable |
| TA-16-207 | 10 gm/24 hr | Not Applicable |
| TA-35-87 | 10 gm/24 hr | Not Applicable |
| Target Fabrication Facility TA-35-213 | 1.8×10^{-04} gm/hr 0.36 gm/yr | Not Applicable |

| Source | Allowable Emission Limits | |
|---------------------------------|---|---|
| | Beryllium | Aluminum |
| 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 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 2.10 of this permit.

⁽¹⁾ Condition 4.2 refers to submitting a Semi-Annual Monitoring report which LANL submitted on August 5, 2009, Tracking Number SBR20090006.

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 | | | 3.5 gm/yr |
| Target Fabrication Facility TA-35-213 ⁽²⁾ | Beryllium (grams) | < 0.00944 | | | 0.36 gm/yr |
| Plutonium Facility TA-55-PF4 Machining Operation ⁽³⁾ | Beryllium (grams) | < 1.495 | | | 2.99 gm/yr |
| | Aluminum (grams) | < 1.495 | | | 2.99 gm/yr |
| Plutonium Facility TA-55-PF4 Foundry Operation ⁽⁴⁾ | Beryllium (grams) | 0 | | | 8.73 x 10 ⁻⁴ gm/yr |
| | Aluminum (grams) | 0 | | | 8.73 x 10 ⁻⁴ gm/yr |
| Beryllium Total⁽⁵⁾ (tons) = | | < 1.66E-06 | | | |
| Aluminum Total (tons) = | | < 1.65E-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 the first 6 months of 2009. ⁽⁵⁾ Other Beryllium activities listed in section 2.2 of the permit do 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 |

¹Excludes 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 2.10 of this permit.

⁽¹⁾ Condition 4.2 refers to submitting a Semi-Annual Monitoring report which LANL submitted on August 5, 2009, Tracking Number SBR20090006.

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 | | | 80 |
| SO ₂ | 0.09 | | | 50 |
| PM | 1.11 | | | 50 |
| PM-10 | 1.11 | | | 50 |
| CO | 11.36 | | | 80 |
| VOCs | 0.78 | | | 50 |
| HAPs | 0.27 | | | 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 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 2.10 of this permit.

(1) Condition 4.2 refers to submitting a Semi-Annual Monitoring report which LANL submitted on August 5, 2009, Tracking Number SBR20090006.

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 | | | 3.07 |
| TA-15-563 | PM ₁₀ | 0.013 | | | 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 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 2.10 of this permit.

⁽¹⁾ Condition 4.2 refers to submitting a Semi-Annual Monitoring report which LANL submitted on August 5, 2009, Tracking Number SBR20090006.

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 | | | Source limits refer to facility-wide limits. |
| HAPs | 1.4 | | | |
| Highest Individual HAP for the first six months of 2009 (Hydrochloric Acid) | 0.5 | | | |

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 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 2.10 of this permit.

⁽¹⁾ Condition 4.2 refers to submitting a Semi-Annual Monitoring report which LANL submitted on August 5, 2009, Tracking Number SBR20090006.

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 | | | Source limits refer to facility-wide limits. (See Facility Emissions Table on Page 1) |
| HAPs | 0.007 | | | |

Note: Degreasers TA-55-DG-2 and TA-55-DG-3 were not used in the first six months of 2009. The units have been removed from LANL and will not be used in the future. The Title V application submitted to NMED in April 2008 reflects this change.

2.7 Internal Combustion Sources

2.7.2 Emission Limits

| Source | Allowable Emission Limits | | | | | | | | | | | |
|-----------|---------------------------|-----|------|-----|-----------------|------|------|------|-----|-----|-----------------|-----|
| | TSP | | PM10 | | NO _x | | CO | | VOC | | SO _x | |
| | pph | tpv | pph | tpv | pph | tpv | pph | tpv | pph | tpv | pph | tpv |
| TA-33-G-1 | 1.4 | 0.6 | 1.4 | 0.6 | 40.3 | 18.1 | 33.7 | 15.2 | 0.7 | 0.3 | 5.5 | 2.5 |

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 2.10 of this permit.

⁽¹⁾ Condition 4.2 refers to submitting a Semi-Annual Monitoring report which LANL submitted on August 5, 2009, Tracking Number SBR20090006.

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 | | | 18.1 |
| SO _x | 0.004 | | | 2.5 |
| TSP | 0.001 | | | 0.6 |
| PM ₁₀ | 0.001 | | | 0.6 |
| CO | 0.019 | | | 15.2 |
| VOC | 0.000 | | | 0.3 |
| HAPs | 5.12E-06 | | | 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 (NSR Permit 2195-P Condition 2) (tons per year) |
|------------------------|---------------------------------------|---|-------------------------------|--|
| NO _x | 0.000 | | | 0.21 |
| SO _x | 0.000 | | | Not Required |
| TSP | 0.000 | | | Not Required |
| PM ₁₀ | 0.000 | | | Not Required |
| CO | 0.000 | | | 0.1 |
| VOC | 0.000 | | | Not Required |
| HAPs | 0.00E+00 | | | No Source Limit |

Note: This generator is not listed in the latest Title V permit, P100M2. However, it is listed in NSR Permit No. 2195-P which was issued on August 8, 2007 and has been included in the Title V application submitted to NMED in April 2008. This generator did not run during the first six months of 2009.

| Generator TA-33-G-3 | January - June Emissions (tons) | July - December Emissions (tons) | Annual Emissions (tons) | Permit Limits (NSR Permit 2195-P Condition 2) (tons per year) |
|------------------------|---------------------------------------|---|-------------------------------|--|
| NO _x | 0.000 | | | 0.21 |
| SO _x | 0.000 | | | Not Required |
| TSP | 0.000 | | | Not Required |
| PM ₁₀ | 0.000 | | | Not Required |
| CO | 0.000 | | | 0.1 |
| VOC | 0.000 | | | Not Required |
| HAPs | 0.00E+00 | | | No Source Limit |

Note: This generator is not listed in the latest Title V permit, P100M2. However, it is listed in NSR Permit No. 2195-P which was issued on August 8, 2007 and has been included in the Title V application submitted to NMED in April 2008. The unit ran less than an hour during the first six months of 2009.

| Generator TA-33-G-4 | January - June Emissions (tons) | July - December Emissions (tons) | Annual Emissions (tons) | Permit Limits (NSR Permit 2195-P Condition 2) (tons per year) |
|------------------------|---------------------------------------|---|-------------------------------|--|
| NO _x | 0.274 | | | 2.33 |
| SO _x | 0.020 | | | 0.16 |
| TSP | 0.020 | | | Not Required |
| PM ₁₀ | 0.020 | | | Not Required |
| CO | 0.059 | | | 1.4 |
| VOC | 0.020 | | | 0.2 |
| HAPs | 8.82E-05 | | | No Source Limit |

Note: This generator is not listed in the latest Title V permit, P100M2. However, it is listed in NSR Permit No. 2195-P which was issued on August 8, 2007 and has been included in the Title V application submitted to NMED in April 2008. The emissions from this unit are included in the facility wide total.

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 | | | No Source Specific Emission Limits for Standby Generators |
| SOx | 0.11 | | | |
| TSP | 0.13 | | | |
| PM ₁₀ | 0.13 | | | |
| CO | 0.65 | | | |
| VOC | 0.13 | | | |
| HAPs | 0.001 | | | |

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 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 2.10 of this permit.

⁽¹⁾ Condition 4.2 refers to submitting a Semi-Annual Monitoring report which LANL submitted on August 5, 2009, Tracking Number SBR20090006.

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 | | | 9.9 |
| PM10 | 0.02 | | | 9.9 |

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

2.9.2 Emission Limits

| Source | Allowable Emission Limits | | | | | | | | | | | |
|---------------------------------------|----------------------------|------|---------------|-----|----------------------------|-----|----------------|-----|-----------------------------|-----|----------------|-----|
| | NO _x (lb/hr) | | CO (lb/hr) | | SO _x (lb/hr) | | TSP (lb/hr) | | PM ₁₀ (lb/hr) | | VOC (lb/hr) | |
| | Gas | Oil | Gas | Oil | Gas | Oil | Gas | Oil | Gas | Oil | Gas | Oil |
| TA-3-22-1 | 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 | 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 | 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 Combined ¹ | 60.2 tpy | | 41.3 tpy | | 7.9 tpy | | 8.4 tpy | | 8.2 tpy | | 5.6 tpy | |
| 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 | | - | |

¹Annual emission limits are 12-month rolling totals. This is pursuant to NSR Permit No. 2195BM1, Table 2.2, Note 1.

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

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 2.10 of this permit.

⁽¹⁾ Condition 4.2 refers to submitting a Semi-Annual Monitoring report which LANL submitted on August 5, 2009, Tracking Number SBR20090006.

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) |
|--|---------------------------------------|---|-------------------------------|--|
| NOx | 7.87 | | | 60.2 |
| SO ₂ | 0.09 | | | 7.9 |
| TSP | 1.03 | | | 8.4 |
| PM ₁₀ | 1.03 | | | 8.2 |
| CO | 5.42 | | | 41.3 |
| VOC | 0.75 | | | 5.6 |
| HAPs | 0.26 | | | No Source Limit |

| 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) |
|---------------------------------------|---------------------------------------|---|-------------------------------|--|
| NOx | 0.054 | | | 33.2 |
| SO ₂ | 0.004 | | | 1.9 |
| TSP | 0.007 | | | 2.3 |
| PM ₁₀ | 0.007 | | | 2.3 |
| CO | 0.011 | | | 19.8 |
| VOC | 0.002 | | | No TPY Limit |
| HAPs | 1.46E-03 | | | No Source Limit |

2.10 Facility Wide Emission Limits

2.10.1 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 (VOCs) | 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 2.10 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 Emission Limits (Permit Condition 2.10.1) (tons per year) |
|--|---------------------------------|----------------------------------|------------------------------|---|
| Nitrogen Oxides | 25.1 | | | 245 |
| Sulfur Dioxide | 0.3 | | | 150 |
| Particulate Matter | 2.4 | | | 120 |
| Carbon Monoxide | 18.1 | | | 225 |
| Volatile Organic Compounds | 5.6 | | | 200 |
| Hazardous Air Pollutants | 1.9 | | | 24 combined |
| Highest Individual HAP (Hydrochloric Acid) | 0.5 | | | 8 individual |