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Title: IDEA ID NO. 856 - LOS ALAMOS NATIONAL LABORATORY
(LANL) SEMI-ANNUAL EMISSIONS REPORT -
OPERATING PERMIT NO: P-100M1

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Intended for: NEW MEXICO ENVIRONMENT DEPARTMENT
AIR QUALITY BUREAU



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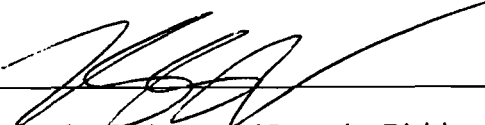
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Permit No. P100M1 {IDEA/Tempo ID No. 856} Permit Issued Date: June 15, 2006

Certification of Truth, Accuracy, and Completeness

I, Victoria A. George 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: 9/20/06

Title: Division Leader, Environmental Protection Division

Los Alamos National Laboratory 2006 Semi-Annual Emissions Report (January through June)

This report is being provided to meet the requirement set forth in permit condition 4.1 of the Los Alamos National Laboratory (LANL) Operating Permit NO: P100M1. The emissions included in this report were calculated using operating data recorded during the first six months of 2006.

Facility Emissions

The following table displays the actual facility-wide emissions compared with the Facility Wide Emission Limits specified in permit condition 2.10.1 of the Operating Permit. These emissions include insignificant sources, which are included to demonstrate that facility-wide emissions are below all PSD applicability threshold limits. Also, due to the method used for calculating Hazardous Air Pollutant (HAP) and Volatile Organic Compound (VOC) emissions from chemical use, fugitive emissions are included (see permit condition 4.1).

| Pollutant | January - June Emissions (tons) | July - December Emissions (tons) | 2006 Annual Emissions (tons) | Facility Wide Emission Limits (Permit Condition 2.10.1) (tons per year) |
|--|---------------------------------|----------------------------------|------------------------------|---|
| Nitrogen Oxides (NO _x) | 31.0 | | | 245 |
| Carbon Monoxide (CO) | 19.4 | | | 225 |
| Volatile Organic Compounds (VOCs) | 6.4 | | | 200 |
| Sulfur Dioxide (SO ₂) | 1.5 | | | 150 |
| Particulate Matter (PM) | 3.1 | | | 120 |
| Hazardous Air Pollutants (HAPs) | 2.2 | | | 24 combined |
| Jan-June Highest Individual HAP (Methanol) | 0.4 | | | 8 individual |

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Source Emissions

The following are the actual emissions from permitted sources listed in permit condition 2.0 of the operating permit for the six month reporting period. Included with these emissions are the source specific emission limits if applicable.

Permit Condition/Source

2.1 Asphalt Production - Asphalt Plant located at TA-60

| Pollutant | January - June Emissions (tons) | July - December Emissions (tons) | Annual Emissions (tons) | Permit Limits (Permit Condition 2.1.2) (tons per year) |
|-----------------|---------------------------------|----------------------------------|-------------------------|--|
| NOx | 0.015 | | | 1.0 |
| SO ₂ | 0.003 | | | 1.0 |
| PM | 0.006 | | | *35.4 lbs/hr |
| CO | 0.245 | | | 2.6 |
| VOC | 0.005 | | | 1.0 |
| HAPs | 0.005 | | | No Source Permit Limit |

Note: * The Asphalt Plant does not have a ton per year limit for PM. The lb/hr emissions were demonstrated during the initial source compliance test conducted on August 25th & 26th, 2005 and submitted to NMED.

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2.2 Beryllium Activities

| Source | Pollutant | January - June Emissions (grams) | July - December Emissions (grams) | Annual Emissions (grams) | Permit Limits (Permit Condition 2.2.2) |
|---|----------------------------------|----------------------------------|---|--------------------------|--|
| Beryllium Test Facility TA-3-141 ⁽¹⁾ | Beryllium | < 0.0033 | | | 3.5 gm/yr |
| Target Fabrication Facility TA-35-213 ⁽²⁾ | Beryllium | < 0.00944 | | | 0.36 gm/yr |
| Plutonium Facility TA-55-PF4 ⁽³⁾ | | | | | |
| | Machining Operation | Beryllium | < 1.495 | | 2.99 gm/yr |
| | | Aluminum | < 1.495 | | 2.99 gm/yr |
| | Foundry Operation ⁽⁴⁾ | Beryllium | 0 | | 8.73 x 10 ⁻⁴ gm/yr |
| | Aluminum | 0 | | | 8.73 x 10 ⁻⁴ gm/yr |
| Jan-June Beryllium Total (tons) = | | < 1.66E-06 | Jan-June 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 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 the first six months of 2006. Other sources listed in section 2.2 of the permit do not require reporting in the Semi-Annual Emissions Report.

2.3 Boilers and Heaters

| Pollutant | January - June Emissions (tons) | July - December Emissions (tons) | Annual Emissions (tons) | Permit Limits (Permit Condition 2.3.2) (tons per year) |
|-----------------------|---------------------------------|----------------------------------|-------------------------|--|
| NOx | 13.8 | | | 80 |
| SO₂ | 0.1 | | | 50 |
| PM | 1.1 | | | 50 |
| PM-10 | 1.1 | | | 50 |
| CO | 11.3 | | | 80 |
| VOC | 0.8 | | | 50 |
| HAPs | 0.26 | | | 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. The TA-21 steam plant boilers are included in this table.

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2.4 Carpenter Shops

| Shop | Pollutant | January - June Emissions (tons) | July - December Emissions (tons) | Annual Emissions (tons) | Permit Limit (Permit Condition 2.4.2) (tons per year) |
|-----------|------------------|---------------------------------|----------------------------------|-------------------------|---|
| TA-3-38 | PM ₁₀ | 0.035 | | | 3.07 |
| TA-15-563 | PM ₁₀ | 0.026 | | | 2.81 |

2.5 Chemical Usage

| Pollutant | January - June Emissions (tons) | July - December Emissions (tons) | Annual Emissions (tons) | Permit Limits (Permit Condition 2.5.3.1) |
|-----------------------------------|---------------------------------|----------------------------------|-------------------------|---|
| VOCs | 4.3 | | | Source limits refer to facility wide limits. (See Facility Emissions Table on Page 1) |
| HAPs | 1.6 | | | |
| Highest Individual HAP (Methanol) | 0.4 | | | |

2.6 Degreasers

| Degreaser TA-55-DG-1 | January - June Emissions (tons) | July - December Emissions (tons) | Annual Emissions (tons) | Permit Limits (Permit Condition 2.6.2.1) (tons per year) |
|----------------------|---------------------------------|----------------------------------|-------------------------|---|
| VOCs | 0.006 | | | Source limits refer to facility wide limits. (See Facility Emissions Table on Page 1) |
| HAPs | 0.006 | | | |

Note: Degreasers TA-55-DG-2 and TA-55-DG-3 were not used in the first six months of 2006. These degreasers are not expected to be used in the near future and are in storage.

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2.7 Internal Combustion Sources

| Generator TA-33-G-1 | January - June Emissions (tons) | July - December Emissions (tons) | Annual Emissions (tons) | Permit Limits (Permit Condition 2.7.2) (tons per year) |
|------------------------|---------------------------------------|--|----------------------------|---|
| TSP | 0.003 | | | 0.6 |
| PM ₁₀ | 0.003 | | | 0.6 |
| NO _x | 0.086 | | | 18.1 |
| CO | 0.070 | | | 15.2 |
| VOC | 0.002 | | | 0.3 |
| SO _x | 0.013 | | | 2.5 |
| HAPs | 1.86E-05 | | | No Source Limit |

Note: The TA-33-G-1 generator had initial start-up on May 18, 2006.

| Standby Generators | January - June Emissions (tons) | July - December Emissions (tons) | Annual Emissions (tons) | Permit Limits |
|--------------------|---------------------------------------|--|----------------------------|--|
| TSP | 0.5 | | | No Source Specific Emission Limits for Standby Generators |
| PM ₁₀ | 0.5 | | | |
| NO _x | 8.4 | | | |
| CO | 1.9 | | | |
| VOC | 0.5 | | | |
| SO _x | 1.3 | | | |
| HAPs | 2.7E-03 | | | |

Note: Standby Generators are insignificant sources.

2.8 Data Disintegrator

| Emission Unit TA-52-11 | January - June Emissions (tons) | July - December Emissions (tons) | Annual Emissions (tons) | Permit Limits (Permit Condition 2.8.2) (tons per year) |
|---------------------------|---------------------------------------|--|----------------------------|---|
| TSP | 0.27 | | | 9.9 |
| PM ₁₀ | 0.24 | | | 9.9 |

Note: The data disintegrator was started on August 18, 2004, and replaced the existing paper shredder. Operating Permit No: P100M1 removed the paper shredder and added the data disintegrator.

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

| Pollutant | January - June Emissions (tons) | July - December Emissions (tons) | Annual Emissions (tons) | Permit Limit (Permit Condition 2.9.2) (tons per year) |
|------------------------|---------------------------------|----------------------------------|-------------------------|---|
| NO_x | 8.7 | | | 60.2 |
| SO₂ | 0.1 | | | 7.9 |
| TSP | 1.1 | | | 8.4 |
| PM₁₀ | 1.1 | | | 8.2 |
| CO | 6.0 | | | 41.3 |
| VOC | 0.8 | | | 5.6 |
| HAPs | 0.3 | | | No Source Limit |

Note: On June 15, 2006, LANL received a revised Title V permit, Operating Permit NO: P100M1. This permit lowered the power plant boilers emission limits to be consistent with Construction Permit 2195B-M1 (issued July 30, 2004). The limits shown here reflect the permit limits in the current Title V permit.