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Date: August 9, 2004
Refer To: ADO-Ops:04-090

Dr. John Volkerding
Program Manager, Compliance & Enforcement Section
New Mexico Environment Department
Air Quality Bureau
2048 Galisteo St.
Santa Fe, New Mexico 87505

Dr. Volkerding:

Attached is a copy of Los Alamos National Laboratory's Title V Operating Permit semi-annual monitoring report for the period **April 30 – June 30, 2004**. This submission is required by permit condition 4.2 of NMED Operating Permit P100 dated April 30, 2004, and is transmitted within the allowed 45 days after the end of the reporting period as specified in permit condition 4.3.

If you have any questions or comments regarding this submittal or would like to discuss the submittal in greater detail, please contact Steve Story at 665-2169.

Sincerely,

A handwritten signature in cursive script that reads 'Barbara A. Story for'.

Scott Gibbs
Acting Associate Director for Operations

SLS:alb

Enc: a/s

Cy:

S. Fong, DOE-LA-AO, A316
K. Benally, DOE-LA-AO, A316
B. Ramsey, RRES-DO, J591
V. George, RRES-DO, J591
M. Reed, RRES-DO, J556
D. Stavert, RRES-EP, J591
J. Dewart, RRES- MAQ, J978
D. Wilburn, RRES-MAQ, J978
P. Wardwell, LC-ESH, A187
RRES-MAQ Title V Monitoring Report File
IM-9, A150
ADO-Ops File

**Los Alamos National Laboratory
Operating Permit P100
Semi-Annual Emissions Monitoring Report
April 30 – June 30, 2004**

Note: Operating Permit P100 was issued April 30, 2004. This report only includes monitoring requirements from April 30, 2004 to June 30, 2004.

1. Asphalt Production

Permit condition 2.1.4.1: Perform monthly six (6) minute opacity readings for each emission point having opacity greater than zero as determined by EPA Method 22.

Permit condition 2.1.4.2: Monitor the differential pressure (inches of water) across the baghouse by the use of a differential pressure gauge, in accordance with condition IV.C.2 of NSR permit number GCP-3-2195G.

Permit condition 2.1.4.3: 40 CFR Part 60, Appendix A, Method 9 shall be used to determine compliance with the opacity limitation.

- Construction began in February to construct the BDM asphalt plant but was stopped for the spotted owl nesting season. Construction has not resumed; no monitoring performed.

2. Beryllium Activities

Registered Beryllium Sources

Chemistry and Metallurgy Research Facility TA-3-29

Permit condition 2.2.4: A log shall be maintained during operations which indicate the number of Be samples processed.

Sigma Facility TA-3-66

Permit condition 2.2.4: A log shall be maintained during operations which show the number of metallographic specimens used in the polishing operation and the weight of Be samples processed in the electroplating / chemical milling, machining, and arc melting/casting operations.

TA-16-207

Permit condition 2.2.4: Project files shall be maintained of components prepared for testing.

TA-35-87

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Permit condition 2.2.4: A log shall be maintained during operations which show the number of beryllium filters cut.

- Registered beryllium sources; log books are available on-site for NMED inspection.

TA-3-141 Permitted Source

Permit Condition 2.2.4: Facility exhaust stack will be equipped with a continuous emission monitor used to measure beryllium emissions.

Quarterly Stack Continuous Emission Monitor Reports

Quarter	Submitted to NMED
First Quarter Report	RRES-MAQ:04-152, dated May 25, 2004
Second Quarter Report	RRES-MAQ:04-249, dated July 29, 2004

Permit Condition 2.2.4: Cartridge and HEPA filters will be equipped with differential pressure gauges that measure the differential pressure across the cartridge and HEPA filters while the exhaust fans are in operation.

- Cartridge and HEPA filters are equipped with differential pressure gauges to read differential pressure across the filters.

TA-35-213 Permitted Source

Permit Condition 2.2.4: Records of the stack emission test results (see Condition 2 of NSR Permit No. 632) and other data needed to determine total emissions shall be retained at the source and made available for inspection by the Department.

- Records of stack emission test results are maintained on-site and available for NMED inspection.

TA-55-PF-4 Permitted Source

Permit Condition 2.2.4: The HEPA filtration systems shall be equipped with a differential pressure gauge that measures the differential pressure (inches of water) across the HEPA filters while the exhaust fans are in operation.

- The HEPA filtration system is equipped with a differential pressure gauge that measures the differential pressure across the HEPA filters.

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Permit Condition 2.2.4: Control efficiency shall be verified by daily HEPA filter pressure drop tests and annual HEPA filter challenge tests of accessible filters.

Summary of HEPA Filter Test Results

Unit	Date	Location	Results	Pass/Fail
No tests performed this period				

3. Boilers and Heaters

Permit condition 2.3.4.1 [Emission units TA-21-357-1, TA-21-357-2, and TA-21-357-3]: A volumetric flow meter shall be utilized to measure the total amount of natural gas being used on a monthly basis.

Permit condition 2.3.4.2: Emission units TA-55-6-BHW-1 and TA-55-6-BHW-2: A volumetric flow meter shall be utilized to measure the total amount of natural gas being used on a monthly basis.

- Volumetric flow meters are utilized to measure the total amount of natural gas being used on a monthly basis for emission units TA-21-357-1, TA-21-357-2, TA-21-357-3, TA-55-6-BHW-1 and TA-55-6-BHW-2. Natural gas usage records are available on-site for NMED inspection.

Permit condition 2.3.4.3: 40 CFR Part 60, Appendix A, Method 9 shall be used to determine compliance with the opacity limitation.

Opacity Test Result Summary (forms attached)

Source	Date	Time	Opacity
No tests performed this period			

4. Carpenter Shops, TA-3-38 & TA-15-563

Permit condition 2.4.4.1: The permittee shall maintain logs of the hours the carpenter shops are in operation.

- A logbook is maintained of the hours of operation at the TA-3-38 shop and is available on-site for NMED inspection. The TA-15-563 carpenter shop has not operated.

5. Chemical Usage

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Permit condition 2.5.4.1: Maintain records of chemical purchasing through facility-wide chemical tracking system, and use the data to calculate the emissions on a semiannual basis in accordance with Condition 4.1.

- Records are maintained in LANL's ChemLog database. The data will be used to calculate emissions and will be submitted in the semi-annual emissions report.

6. Degreasers

Permit condition 2.6.4.1: Record the amount of solvent added to the degreaser, and calculate the emissions on a semiannual basis in accordance with Condition 4.1.

Permit condition 2.6.4.2: Complete checklist for work practice standards.

- Records of solvent added to the degreaser and completed work practice checklists are maintained on-site and are available for NMED inspection.

7. Internal Combustion Sources

Stationary Standby Generators

Permit condition 2.7.4: Track and record hours of operation for stationary standby generators on a semiannual basis.

- Records tracking generator hours of operation are maintained on-site and are available for NMED inspection.

TA-33-G-1 Diesel Fired Generator

Permit condition 2.7.4: TA-33-G-1 Track hourly and 12-month rolling total kWh.

Permit condition 2.7.4: Record hours of operation and the time operation begins and ends each day.

Permit condition 2.7.4.1: 40 CFR Part 60, Appendix A, Method 9 shall be used to determine compliance with the opacity limitation.

- TA-33-G-1 generator has not been installed. No monitoring performed this period.

8. Paper Shredder, TA-52-11

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Permit condition 2.8.4.1: The permittee shall maintain a log of the number of boxes of media that are shredded and calculate the emissions on a semiannual basis in accordance with Condition 4.1.

- The number of boxes of media shredded is recorded in a logbook and is available for NMED inspection.

9. Power Plant at Technical Area 3 (TA-3-22)

Permit condition 2.9.4.1: A volumetric flow meter shall be installed and utilized to measure the total amount of natural gas being used on a daily basis.

Permit condition 2.9.4.2: Total fuel oil consumption shall be monitored on a monthly basis.

Permit condition 2.9.4.3: If total natural gas used exceeds 3,400 MMscf per 365 day rolling total, semiannual compliance stack tests shall be conducted for NOx and CO from each unit in accordance with NSR permit 2195B. This testing shall continue until natural gas usage is calculated to be less than 3,400 MMscf per 365 day rolling total for a total of 730 consecutive days.

- Daily natural gas and monthly fuel oil usage records are available on-site for NMED inspection. Since LANL did not exceed 3,400 MMscf per 365 days, semiannual compliance testing is not required.

Permit condition 2.9.4.4: 40 CFR Part 60, Appendix A, Method 9 shall be used to determine compliance with the opacity limitation.

Opacity Test Result Summary (forms attached)

Source	Date	Time	Opacity
No tests performed this period			

10. Rock Crusher, TA-21-RC, Portable

Permit condition 2.10.4.1: A compliance test to measure fugitive particulate emissions shall be conducted within 60 days of initial startup, in accordance with the requirements in NSR permit 2195.

Permit condition 2.10.4.2: 40 CFR Part 60, Appendix A, Method 9 shall be used to determine compliance with the opacity limitation.

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- LANL submitted a letter to NMED on June 10, 2004 providing notification that LANL will not operate the rock crusher. No monitoring was performed.