

Associate Directorate for Technical Services P.O. Box 1663, A104 Los Alamos, New Mexico 87545 505-667-0079/Fax 505-665-1812

Date: January 23, 2006 *Refer To:* ADTS:06-003

Ms. Debra McElroy Program Manager, Compliance & Enforcement Section New Mexico Environment Department Air Quality Bureau 2048 Galisteo Street Santa Fe, New Mexico 87505

IDEA ID NO. 856 – LOS ALAMOS NATIONAL LABORATORY (LANL) AIR QUALITY TITLE V OPERATING PERMIT P100 ANNUAL COMPLIANCE CERTIFICATION REPORT FOR JANUARY – DECEMBER, 2005

Dear Ms. McElroy:

Attached is a copy of Los Alamos National Laboratory's Title V Operating Permit Annual Compliance Certification report for the period **January 1 – December 31, 2005**. This submission is required by permit condition 5.1 of NMED Operating Permit P100 dated April 30, 2004, and is transmitted by January 30th following the reporting period. In addition, this certification is made on NMED's Annual Compliance Certification Report form, is certified by LANL's "responsible official" as defined in 20.2.70 NMAC, and a copy is being provided to US EPA Region 6.

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 (505) 665-2169.

Sincerely,

Carolyn Mangeng () Associate Director for Technical Services

SLS:alb

Enc: a/s

Cy:

David Neleigh, (6PD-R), U.S. Environmental Protection Agency, 1445 Ross Avenue, Suite 1200, Dallas, Texas, 75202-2733
S. Fong, DOE-LA-AO, A316
K. Hargis, ENV-DO, J591
D. Stavert, ENV-DO, J591
P. Wardwell, LC-ESH, A187
D. Wilburn, ENV-MAQ, J978
S. Story, ENV-MAQ, J978

Ms. Debra McElroy ADTS:06-003

D. Fuehne, ENV-MAQ, J978 S. Cossey, ENV-MAQ, J978 M. Stockton, ENV-MAQ, J978 M. Clay, DX-TSO, C925 F. Sisneros, DX-TSO, C925 D. Hemphill, ESA-MEE, P941 A. Sherrard, ESA-MEE, C924 D. Macdonell, ESA-WOI, C928 B. Aubert, ESA-WR, P946 R. Wallace, FM-DO, K492 D. Padilla, FM-UI, K718 J. Gonzales, FM-UI, K718 J. Haugen, FM-UI, K718 - T. Cull, HSR-5, K486 R. Patterson, MST-DO, G770 P. Dunn, MST-6, G770 S. Abeln, MST-6, G741 P. Reardon, MST-7, E549 T. Blum, NMT-DO, E509 P. Sasa, NMT-DO, G746 H. Decker, NMT-7, E501 S. Evans-Carmichael, NMT-7, E501 C. Munson, P-24, E526 S. Barnes, S-5, G733 R. Costa, SSS-AE-V02, A199 ENV-MAQ Title V Certification Report File **ADTS File ENV-MAQ** File

I A-UB-06-556

Approved for public release; distribution is unlimited.

Title:	2005 Annual Compliance Certification Report Air Quality Title V Operating Permit P100
Author(s):	Steven Story, ENV-MAQ
Submitted to:	Ms. Debra McElroy Program Manager, Compliance & Enforcement Section New Mexico Environment Department Air Quality Bureau 2048 Galisteo St. Santa Fe, New Mexico 87505



Los Alamos National Laboratory, an affirmative action/equal opportunity employer, is operated by the University of California for the U.S. Department of Energy under contract W-7405-ENG-36. By acceptance of this article, the publisher recognizes that the U.S. Government retains a nonexclusive, royalty-free license to publish or reproduce the published form of this contribution, or to allow others to do so, for U.S. Government purposes. Los Alamos National Laboratory requests that the publisher identify this article as work performed under the auspices of the U.S. Department of Energy. Los Alamos National Laboratory strongly supports academic freedom and a researcher's right to publish; as an institution, however, the Laboratory does not endorse the viewpoint of a publication or guarantee its technical correctness.

Form 836 (8/00)

Operating Permit Annual Compliance Certification Report Form January 1 – December 31, 2005

(PART 1)

Identifying Information	
Source Name: Los Alamos National Laboratory	County: Los Alamos
Source Address: City: Los Alamos	State: Zip Code: 87545
Responsible Official: <u>Carolyn A. Mangeng</u> Technical Contact: <u>Steven L. Story</u>	Ph No. (505) 667-0079 Fax No. (505) 665-1812 Ph No. (505) 665-2169 Fax No. (505) 665-8858
Principal Company Product or Business: <u>National Security and Nu</u>	clear Weapons Research Primary SIC Code: 9711
Permit No. <u>P100 {IDEA/Tempo ID No. 856}</u>	Permit Issued Date: <u>April 30, 2004</u>
Certification of Truth, Accuracy, and Compl	eteness
I, <u>Carolyn A. Mangeng</u> certify that, based on informat statements and information contained in the attached annual compli Signature <u>Mangang</u> Title: <u>Associate Director (Acting)</u> , Technical Services Directoral	iance certification are true, accurate, and complete. Date: $\frac{1/26/06}{06}$

(PART 2)

Page 2 of 25

		N- D100	1 age 2 01 25
Annual Compliance	ce Certification Data for State Pern	mit No. P100	
Permit Term or Condition Identification No.	Method(s) or other information or other facts used to determine the compliance status	Data Collection Frequency continuous (C) or intermittent (I)	In Compliance? If so type a Yes. If not type a Dev and complete table entitled Deviation Reporting (Part 3)
{1]	{2}	{3}	{4}
2.1 Asphalt Production	The Asphalt Plant started operations on July 19, 2005 [General Permit GCP-3-2195G].		
2.1.1 Applicable Req's 2.1.1.1 of the permit	LANL Asphalt Plant operations meet requirements of 20.2.11 NMAC; 40 CFR Part 60, Subpart I; and NSR Permit No. GCP-3- 2195G.	I	Yes
2.1.2 Emission Limits	Emissions are calculated and reported to NMED on a 6 month basis in accordance with permit condition 4.1. Emissions are compared to allowable emission limits in each semi- annual report. Particulate matter (PM) rate (lb/hr) was determined during compliance testing and a report with this value was submitted to NMED on 9/22/2005.	Ι	Yes
2.1.2.1 of the permit	LANL has certified opacity readers on-site who perform opacity readings using 40 CFR 60, Appendix A, Method 9 to determine compliance with the opacity limitation. Opacity reports are provided to NMED in the semi- annual monitoring reports. Visible emissions did not equal or exceed 20% opacity.	Ι	Yes
2.1.3 Operational Req's 2.1.3.1 of the permit	Data on asphalt production is collected on a monthly basis. The 12-month rolling total is calculated and compared against production limit set in this permit condition. LANL did not exceed the 13,000 tons per year, 12-month rolling total limit.	1	Yes
2.1.3.2 of the permit	The plant is equipped with a fugitive dust control system, which limits particulate emissions to the stack.	1	Yes
2.1.3.3 of the permit	Dust collection and control systems are in place to sufficiently prevent opacity from exceeding 20%. Opacity is monitored monthly and reports are included in LANL's semi-annual monitoring reports. Opacity has not exceeded 20%.	1	Yes

			Page 3 of 25
Permit Term or Condition Identification No.	Method(s) or other information or other facts used to determine the compliance status	Data Collection Frequency continuous (C) or intermittent (I)	In Compliance? If so type a Yes. If not type a Dev and complete table entitled Deviation Reporting (Part 3)
[1]	[2]	{3}	{4}
2.1.3.4 of the permit	The baghouse is equipped with a differential pressure gauge, which continuously monitors differential pressure across the baghouse.	1	Yes
2.1.3.5 of the permit	Natural gas is not used by the plant at this time.	N/A	Yes
2.1.3.6 of the permit	Total sulfur content is less than 0.5 percent by weight for propane used. Purchase records from the propane supplier are maintained on site as required by Section 2.1.5.1 of the permit.	I	Yes
2.1.3.7 of the permit	The Asphalt Plant operates within the specified hours-of-operation. To aid operators, a sunrise/sunset chart is maintained at the plant. A log of start up and shut down times is kept as required by Section 2.1.5.1.	I	Yes
2.1.3.8 of the permit	The Asphalt Plant did not exceed 4,380 hours of operation in 2005. A log is maintained as required by Section 2.1.5.1.	I	Yes
2.1.3.9 of the permit	LANL waters unpaved haul roads to prevent visible emissions. A log is maintained as required by Section 2.1.5.1.	I	Yes
2.1.3.10 of the permit	A location evaluation of this source has been performed and placement, including setback and co-location, meets conditions of the NSR permit GCP3-2195G. Particulate abatement systems are in place to reduce emissions from the plant. Haul roads will be watered to reduce dust. No internal combustion engines will be used at the plant.	I	Yes
2.1.4 EmissionsMonitoring Req's2.1.4.1 of the permit	LANL has certified opacity readers on-site who perform monthly six minute opacity readings using 40 CFR 60, Appendix A, Method 9 to determine compliance with the opacity limitation. Opacity reports are provided to NMED in the semi-annual monitoring reports. Visible emissions did not equal or exceed 20% opacity.	I	Yes
2.1.4.2 of the permit	The differential pressure across the bag house is monitored and collected in accordance with	I	Yes

(PART 2)

Page 4 of 25 In Compliance? If so Permit Term or Condition Data Collection Method(s) or other information or other facts type a Yes. If not Frequency used to determine the compliance status Identification No. continuous (C) or type a Dev and complete table entitled intermittent (I) **Deviation Reporting** (Part 3) {4} {3} {2} [1] condition IV.C.2 of NSR permit GCP-3-2195G. I Yes LANL has certified opacity readers on-site who 2.1.4.3 of the permit perform opacity readings using 40 CFR 60. Appendix A, Method 9 to determine compliance with opacity limitation. Recordkeeping conditions are met using the I Yes 2.1.5 Recordkeeping following methods: hours of operation - hour 2.1.5.1 of the permit log kept; production rates - production log kept; number of haul truck trips – haul log kept; fuel sulfur content - supplier documentation kept; tickets of fuel purchased - fuel purchase documents kept; frequency of water applied to haul roads - haul log includes water applied; and copies of proposed and performed maintenance - maintenance records are kept. (Records are kept at the asphalt plant). Yes An initial start-up compliance test for PM and I 2.1.5.2 of the permit opacity was performed on August 25 & 26, 2005. A copy of the final report was submitted to NMED on September 22, 2005. The report is also maintained on-site. I Monthly six (6)minute opacity readings are Yes 2.1.5.3 of the permit performed. Results are submitted to NMED with the semi-annual monitoring report. Records are also maintained on-site. I Yes Records of the monitoring of differential 2.1.5.4 of the permit pressure across the baghouse are maintained onsite. Emissions and monitoring reports are submitted Ĩ Yes 2.1.6 Reporting on a 6-month basis in accordance with permit 2.1.6.1 of the permit conditions 4.1 and 4.2. LANL submitted monitoring reports to NMED on January 19, 2005 and August 10, 2005. Emissions reports

were submitted to NMED on March 23, 2005

and September 15, 2005.

	<u></u>		Page 5 of 25
Permit Term or Condition Identification No.	Method(s) or other information or other facts used to determine the compliance status	Data Collection Frequency continuous (C) or intermittent (I)	In Compliance? If so type a Yes. If not type a Dev and complete table entitled Deviation Reporting (Part 3)
{1} .	{2}	{3}	{4}
2.2 Beryllium Activities			
2.2.1 Applicable Req's2.2.1.1. of the permit	LANL beryllium operations meet requirements of 40 CFR Part 61, Subpart C, and NSR Permit Numbers 632, 634 and 1081.	I	Yes
2.2.2 Emission Limits	Emissions are calculated and reported to NMED on a 6 month basis in accordance with permit condition 4.1, Emissions are compared	1	Yes
	to allowable emission limits in each semi- annual report. Allowable emission limits have not been exceeded.		
2.2.3 Operational Req's	TA-3-29: Hood exhausts from melting operations are exhausted through a HEPA filtration system prior to entering the	I	Yes
	atmosphere. TA-3-66: Emissions from machining and arc melt/casting operations are exhausted through a HEPA filtration system prior to entering the atmosphere. Polishing and electroplating/ chemical milling operations are conducted in aqueous solution or lubricant baths.		
	TA-3-141: All processes are exhausted through a HEPA filtration system prior to entering the atmosphere. Powder operations, other than closed glovebox operations, and machining operations, other than metallographic		
	preparation, are exhausted through a cartridge filtration system then through HEPA filtration. Metallographic preparation activities are conducted in lubricating baths or equivalent. No		
	process limits were exceeded. TA-16-207: Sanding of beryllium surfaces is performed wet using a fine grit abrasive.		
	TA-35-87: All cutting and punching of beryllium foil occurs within an enclosed glovebox. TA-35-213: All processes are exhausted		
	through a HEPA filtration system prior to	<u> </u>	

(PART 2)

Page 6 of 25

			Page 6 of 25
Permit Term or Condition Identification No.	Method(s) or other information or other facts used to determine the compliance status	Data Collection Frequency continuous (C) or intermittent (I)	In Compliance? If so type a Yes. If not type a Dev and complete table entitled Deviation Reporting (Part 3)
[1]	[2]	{3}	{4}
	entering the atmosphere. TA-55-PF4: All operations are exhausted through the facility HEPA filtration system (3 filters with a control efficiency of 99.95% each). The non-accessible filter (4 th filter with a control efficiency of 99.95%) is replaced when pressure drop across the filter indicates breakthrough or excessive loading. No process limits were exceeded.		
2.2.4 Monitoring Req's	TA-3-29 – A log indicating the number of samples processed is maintained. TA-3-66 – Log books are maintained during operations showing the number of metallographic specimens used in the polishing operation and the weight of samples processed in the electroplating/chemical milling, machining, and arc melting/casting operations. TA-3-141 – The exhaust stack has a continuous emission monitor; cartridge and HEPA filters are equipped with differential pressure gauges	Ι	Yes
	that measure differential pressure when fans are in operation TA-16-207– Project files of components prepared for testing are maintained. TA-35-87 – A log of filters cut is maintained. TA-35-213 – A copy of the stack emission test results is available for inspection. TA-55-PF4 – The HEPA filtration system contains a differential pressure gauge that		
	measures differential pressure across the HEPA filters. The differential pressure is verified daily while the exhaust fans are in operation. Annual HEPA filter challenge tests are performed and results are submitted in LANL's semi-annual monitoring reports.	•	
2.2.5 Recordkeeping	TA-3-29 – Recordkeeping for this source is specified in condition 2.2.4. TA-3-66 – Recordkeeping for this source is	I	Yes

Version: 6/18/2002

(PART 2)

Page 7 of 25

			Page 7 of 25
Permit Term or Condition Identification No.	Method(s) or other information or other facts used to determine the compliance status	Data Collection Frequency continuous (C) or intermittent (I)	In Compliance? If so type a Yes. If not type a Dev and complete table entitled Deviation Reporting (Part 3)
{1 }	[2]	{3}	.[4]
	specified in condition 2.2.4. TA-3-141 – LANL maintains inventory records to demonstrate compliance with beryllium process limits and daily differential pressure readings. Control equipment maintenance is also recorded. TA-16-207 – Recordkeeping for this source is specified in condition 2.2.4. TA-35-87 – Recordkeeping for this source is specified in condition 2.2.4. TA-35-213 – Recordkeeping for this source is specified in condition 2.2.4. TA-55-PF4 – Stack emission test results and operating parameters, including daily differential pressure readings when exhaust fans are running, are recorded and available at the facility. A copy of annual HEPA filter test reports and daily differential pressure readings are kept. Filter change out records are also kept. Process records are available of the		
2.2.6 Reporting	quantity and weight of classified parts processed during a 24-hour period and annually. Emissions and monitoring reports are submitted on a 6-month basis in accordance with permit conditions 4.1 and 4.2. LANL submitted monitoring reports to NMED on January 19, 2005 and August 10, 2005. Emissions reports were submitted to NMED on March 23, 2005 and September 15, 2005.	1	Yes
1	TA-3-141 quarterly reports were submitted to NMED within 60 days after each calendar quarter. Results for 2004/2005 were submitted on 2/7/2005, 5/19/2005, 8/22/2005 and 11/18/2005 documenting the compliance status with the permitted emission rate from the continuous monitoring system.		

(PART 2)

Page 8 of 25

·····			Page 8 of 25
Permit Term or Condition Identification No.	Method(s) or other information or other facts used to determine the compliance status	Data Collection Frequency continuous (C) or intermittent (I)	In Compliance? If so type a Yes. If not type a Dev and complete table entitled Deviation Reporting (Part 3)
[1]	{2}	{3}	{4 }
2.3 Boilers and Heaters			
2.3.1 Applicable Req's 2.3.1.1 of the permit	LANL boiler and heater operations meet the requirements of 40 CFR Part 60, Subpart Dc, as required, and 20.2.61 NMAC.	I	Yes
2.3.2 Emission Limits	Emissions are calculated and reported to NMED on a 6 month basis in accordance with permit condition 4.1. Emissions are compared to the allowable emission limits in each semi- annual report. In addition, fuel use records are collected monthly and emissions calculated to verify compliance with the emission limits. Allowable emission limits have not been exceeded.	I	Yes
2.3.2.1 of the permit	LANL has certified opacity readers on-site who perform opacity readings using 40 CFR 60, Appendix A, Method 9 to determine compliance with the opacity limitation. Opacity reports are provided to NMED in the semi- annual monitoring reports. Visible emissions did not equal or exceed 20% opacity.	1	Yes
2.3.3 Operational Req's 2.3.3.1 of the permit	For units listed under this permit condition, a 12-month rolling total of natural gas used is calculated and recorded each month. The rolling total is compared to the fuel use limit each month and provided in the semi-annual monitoring report. Natural gas usage limits were not exceeded.	Ι	Yes
2.3.3.2 of the permit	For units located at TA-21-357, a 12-month rolling total of natural gas and fuel oil use is calculated and recorded each month. Rolling totals are compared to fuel use limits in this permit and provided in the semi-annual monitoring report. Natural gas and fuel oil usage limits were not exceeded.	1	Yes
2.3.4 Monitoring Req's 2.3.4.1 of the permit	For units located at TA-21-357, a volumetric flow meter is in place and used to monitor monthly natural gas use. Readings from this	I	Yes

Version: 6/18/2002

.

(PART 2)

Page 9 of 25

			Page 9 of 25
Permit Term or Condition Identification No.	Method(s) or other information or other facts used to determine the compliance status	Data Collection Frequency continuous (C) or intermittent (I)	In Compliance? If so type a Yes. If not type a Dev and complete table entitled Deviation Reporting (Part 3)
[1]	{2}	[3]	[4]
	flow meter are reported monthly and included in LANL's Gas Usage Report.		
2.3.4.2 of the permit	For units located at TA-55-6, a volumetric flow meter is in place and used to monitor monthly natural gas use. Readings from this flow meter are reported monthly and included in LANL's Gas Usage Report.	Ι	Yes
2.3.4.3 of the permit	LANL has certified opacity readers on-site who perform opacity readings using 40 CFR 60, Appendix A, Method 9 to determine compliance with the opacity limitation.	I	Yes
2.3.5 Recordkeeping 2.3.5.1 of the permit	Facility wide natural gas use is collected on a monthly basis and distributed in the LANL Gas Usage Report. From the total usage, metered sources are subtracted and the difference is apportioned between non-metered boilers and heaters based on fuel or heat input ratings.	I	Yes
	Facility wide fuel oil usage for applicable units is collected on a monthly basis and distributed in the LANL Plant Quantities Report.		
2.3.6 Reporting2.3.6.1 of the permit	Emissions and monitoring reports are submitted on a 6-month basis in accordance with permit conditions 4.1 and 4.2. LANL submitted monitoring reports to NMED on January 19, 2005 and August 10, 2005. Emissions reports were submitted to NMED on March 23, 2005 and September 15, 2005.	I	Yes
2.4 Carpenter Shops	TA-15-563 Carpenter Shop started operations on June 2, 2005.		
2.4.1 Applicable Req's 2.4.1.1 of the permit	None	N/A	N/A
2.4.2 Emission Limits	Emissions of PM_{10} are calculated and reported on a 6 month basis in accordance with permit condition 4.1. Emissions are compared to allowable emission limits in each semi-annual report. Allowable emission limits have not been exceeded.	I	Yes

(PART 2)

Page 10 of 25

			Page 10 of 25
Permit Term or Condition Identification No.	Method(s) or other information or other facts used to determine the compliance status	Data Collection Frequency continuous (C) or intermittent (I)	In Compliance? If so type a Yes. If not type a Dev and complete table entitled Deviation Reporting (Part 3)
{1}	{2}	{3}	[4]
2.4.3 Operational Req's 2.4.3.1 of the permit	Hourly use of saws, drills, shaping and sanding equipment are tracked. Hours of operation are collected monthly and provided in the semi- annual monitoring report. LANL carpenter shops did not exceed 4368 hours of operation in 2005.	I	Yes
2.4.3.2 of the permit	Process cyclones are operated during shop operations that are vented to the cyclones.	1	Yes
2.4.4 Monitoring Req's 2.4.4.1 of the permit	A log is maintained of the hours of operation for each shop.	1	Yes
2.4.5 Recordkeeping * 2.4.5.1 of the permit	The monthly hours of operation for each shop is recorded and provided in the semi-annual monitoring report.	· 1	Yes
2.4.6 Reporting. 2.4.6.1 of the permit	Emissions and monitoring reports are submitted on a 6-month basis in accordance with permit conditions 4.1 and 4.2. LANL submitted monitoring reports to NMED on January 19, 2005 and August 10, 2005. Emissions reports were submitted to NMED on March 23, 2005 and September 15, 2005.	I	Yes
2.5 Chemical Usage			
2.5.1 Applicable Req's	None	N/A	N/A
2.5.2 Operational Req's	None	N/A	N/A
2.5.3 Emission Limits 2.5.3.1 of the permit	Facility wide emissions from chemical use are calculated and reported on a 6 month basis in accordance with permit condition 4.1. A comparison against the allowable emission limits is performed at each of these reporting periods. Facility wide emission limits have not been exceeded.	I	Yes
2.5.4 Monitoring Req's 2.5.4.1 of the permit	Facility wide chemical purchase records are collected in LANL's ChemLog database and used to calculate emissions. Chemical emission information is submitted to NMED every 6- months in accordance with permit condition 4.1.		Yes

Version: 6/18/2002

LA-UR-06-556

· .

(PART 2)

Page 11 of 25

			Page 11 of 25
Permit Term or Condition Identification No.	Method(s) or other information or other facts used to determine the compliance status	Data Collection Frequency continuous (C) or intermittent (I)	In Compliance? If so type a Yes. If not type a Dev and complete table entitled Deviation Reporting (Part 3)
[1]	{2}	{3}	{4}
2.5.5 Reporting 2.5.5.1 of the permit	Emissions and monitoring reports are submitted on a 6-month basis in accordance with permit conditions 4.1 and 4.2. LANL submitted monitoring reports to NMED on January 19, 2005 and August 10, 2005. Emissions reports were submitted to NMED on March 23, 2005 and September 15, 2005.	I	Yes
2.6 Degreasers	TA-55-DG-2 & TA-55-DG-3 did not operate in CY2005		
2.6.1 Applicable Req's 2.6.1.1 of the permit	LANL degreaser operations meet the requirements of 40 CFR Part 63, Subpart T.	Ι	Yes
2.6.2 Emission Limits 2.6.2.1 of the permit	Emissions are calculated and reported on a 6 month basis in accordance with permit condition 4.1. Comparison against the allowable emission limits is performed at each of these reporting periods. Allowable emissions have not been exceeded.	I	Yes
2.6.3 Operational Req's 2.6.3.1 of the permit	 2.6.3.1.1 - The degreaser is equipped with a tight fitting cover. An administrative control is in place to close the lid after use. 2.6.3.1.2 - The freeboard ratio is maintained through administrative controls, the use of a liquid depth measuring device, and a solvent fill line. 2.6.3.1.3 - All waste solvent and solvent contaminated rags are collected and stored in closed containers appropriate for the chemical. 2.6.3.1.4 - Administrative controls are in place to allow flushing in the freeboard area only. 2.6.3.1.5 - Administrative controls are in place to allow cleaned parts to drip for 15 seconds or until dripping stops. 2.6.3.1.7 - Administrative controls are in place to immediately wipe up all spills. 	I	Yes

(PART 2)

Page 12 of 25

			Page 12 of 25
Permit Term or Condition Identification No.	Method(s) or other information or other facts used to determine the compliance status	Data Collection Frequency continuous (C) or intermittent (I)	In Compliance? If so type a Yes. If not type a Dev and complete table entitled Deviation Reporting (Part 3)
{1}	[2]	{3}	[4]
	 2.6.3.1.8 - Administrative controls are in place to prevent splashing with an agitation device. 2.6.3.1.9 - The degreaser is located in an enclosure (glove box) with a set ventilation flow rate. Exhaust flows are set to not exceed 40 m/sec. 2.6.3.1.10 - Administrative controls are in place to prevent the contamination or cleaning of absorbent materials such as followed or poper. 		
2.6.4 Monitoring Req's 2.6.4.1 of the permit	sponges, fabric, wood, or paper. A computerized software system is used to track the amount of degreaser solvent added, removed, and lost. This system is used to calculate emissions, which are reported on a 6- month basis in accordance with permit	1	Yes
2.6.4.2 of the permit	condition 4.1. A checklist is used to verify all work practice standards are in place and being performed. The	I	Yes
2.6.5 Recordkeeping 2.6.5.1 of the permit	checklist is posted on the glovebox. A Material Safety Data Sheet (MSDS) is kept and available that describes the content and concentration of the solvent. The work practice checklist is kept as a record at the operating	1	Yes
2.6.6 Reporting 2.6.6.1 of the permit	location. Only one of the three permitted degreasers is being used. If other units are brought on-line, NMED will be notified.	I	Yes
2.6.6.2 of the permit	If a stored unit should become active, a compliance report will be submitted to the NMED within 150 days after startup.	I	Yes
2.6.6.3 of the permit	Emissions and monitoring reports are submitted on a 6-month basis in accordance with permit conditions 4.1 and 4.2. LANL submitted monitoring reports to NMED on January 19, 2005 and August 10, 2005. Emissions reports were submitted to NMED on March 23, 2005 and September 15, 2005.	I	Yes

(PART 2)

Page 13 of 25

			Page 13 of 25
Permit Term or Condition Identification No.	Method(s) or other information or other facts used to determine the compliance status	Data Collection Frequency continuous (C) or intermittent (I)	In Compliance? If so type a Yes. If not type a Dev and complete table entitled Deviation Reporting (Part 3)
{1}	{2}	{3}	{4}
2.7 Internal Combustion	TA-33-G-1 generator did not operate in CY2005.		
2.7.1 Applicable Req's 2.7.1.1 of the permit	The TA-33-G-1 generator did not operate in calendar year 2005.	N/A	N/A
2.7.2 Emission Limits	The TA-33-G-1 generator did not operate in calendar year 2005.	N/A	N/A
2.7.2.1 of the permit	The TA-33-G-1 generator did not operate in calendar year 2005.	I	Yes
	LANL has certified opacity readers on-site who perform opacity readings using 40 CFR 60, Appendix A, Method 9 to determine compliance with the opacity limitation. Visible emissions did not equal or exceed 20% opacity.		
2.7.3 Operational Req's 2.7.3.1 of the permit	Hours of each stationary standby generator are tracked and evaluated twice a year to verify that the average hours per year limit is not exceeded. The hours of operation are provided to NMED in LANL's Semi-Annual Monitoring report. The limit of 168 hr/year average was not exceeded.	I	Yes
2.7.3.2 of the permit	The TA-33-G-1 generator did not operate in calendar year 2005.	N/A	N/A
2.7.3.3 of the permit	The TA-33-G-1 generator did not operate in calendar year 2005.	N/A	N/A
2.7.4 Monitoring Req's	Hours of each stationary standby generator are tracked and evaluated twice a year to verify that the average hour per year limit is not exceeded. The hours of operation are provided to NMED in LANL's Semi-Annual Monitoring report.	I	Yes
	The TA-33-G-1 generator did not operate in 2005.		
2.7.4.1 of the permit	LANL has certified opacity readers on-site who perform opacity readings using 40 CFR 60, Appendix A, Method 9 to determine compliance with the opacity limitation.	1	Yes

(PART 2)

Page 14 of 25

			Page 14 of 25	
Permit Term or Condition Identification No.	Method(s) or other information or other facts used to determine the compliance status	Data Collection Frequency continuous (C) or intermittent (I)	In Compliance? If so type a Yes. If not type a Dev and complete table entitled Deviation Reporting (Part 3)	
{1}	{2}	{3}	{4}	
2.7.5 Recordkeeping 2.7.5.1 of the permit	Recordkeeping requirements are specified at condition 2.7.4.	I	Yes	
2.7.6 Reporting 2.7.6.1 of the permit	Emissions and monitoring reports are submitted on a 6-month basis in accordance with permit conditions 4.1 and 4.2. LANL submitted monitoring reports to NMED on January 19, 2005 and August 10, 2005. Emissions reports were submitted to NMED on March 23, 2005 and September 15, 2005.	Ι	Yes	
2.8 Paper Shredder [Data Disintegrator]	Paper Shredder was replaced by Data Disintegrator on August 18, 2004 under NSR permit No. 2195-H.			
2.8.1 Applicable Req's 2.8.1.1 of the permit	LANL has met start-up requirements of NSR permit No. 2195-H. LANL submitted a Title V permit modification to NMED on July 20, 2005 to replace the paper shredder with the data disintegrator. LANL is reporting emission, monitoring, and record keeping requirements from permit 2195-H in our semi-annual monitoring and emission reports.	1	Yes	
2.8.2 Emission Limits 2.8.2.1 of the permit	Emissions are calculated and reported on a 6 month basis in accordance with permit condition 4.1. A comparison against the allowable emission limits is performed at each of these reporting periods. Allowable emission limits were not exceeded.	I	Yes	
2.8.3 Operational Req's 2.8.3.1 of the permit	None	N/A	N/A	
2.8.4 Monitoring Req's 2.8.4.1 of the permit	A log is kept to record the number of boxes of paper and media shredded monthly and is used to calculate emissions on a semi-annual basis. The number of boxes shredded is provided in the semi-annual monitoring reports.	Ι	Yes	
2.8.5 Recordkeeping 2.8.5.1 of the permit	A log is kept of the number of boxes of paper/media that are shredded monthly. In addition, maintenance records for the cyclone and cloth tube filter are kept.	I	Yes	

.

(PART 2)

Page 15 of 25

	· · · · · · · · · · · · · · · · · · ·	T	Page 15 of 25	
Permit Term or Condition Identification No.	Method(s) or other information or other facts used to determine the compliance status	Data Collection Frequency continuous (C) or intermittent (I)	In Compliance? If so type a Yes. If not type a Dev and complete table entitled Deviation Reporting (Part 3)	
{1}	{2}	{3}	{4}	
2.8.6 Reporting2.8.6.1 of the permit	Emissions and monitoring reports are submitted on a 6-month basis in accordance with permit conditions 4.1 and 4.2. LANL submitted monitoring reports to NMED on January 19, 2005 and August 10, 2005. Emissions reports were submitted to NMED on March 23, 2005 and September 15, 2005.	Ι	Yes	
2.9 Power Plant (TA-3-22)	NSR Permit No. 2195-BM1 issued July 30, 2004			
2.9.1 Applicable Req's 2.9.1.1 of the permit	Power Plant operations meet the requirements of 20.2.33, 20.2.34, 20.2.61 NMAC and NSR Permit Number 2195-BM1.	I	Yes	
2.9.2 Emission Limits	Compliance with the pound per hour emission limits was determined during source compliance tests performed in September 2002. The test results were provided to NMED. Emissions are also calculated and reported to the NMED on a 6 month basis in accordance with permit condition 4.1. Comparison against the 12-month rolling total emission limits is performed each month and at each of these reporting periods.	Ι	Dev	
2.9.2.1 of the permit	Results from source compliance tests performed on the boilers in September 2002, demonstrate that NO_2 emissions do not exceed 0.3 lbs per MMBtu.	I	Yes	
2.9.2.2 of the permit	LANL has certified opacity readers on-site who perform opacity readings using 40 CFR 60, Appendix A, Method 9 to determine compliance with the opacity limitation. Opacity reports are provided to NMED in the semi- annual monitoring reports. Visible emissions did not equal or exceed 20% opacity.	1	Yes	
2.9.3 Operational Req's 2.9.3.1 of the permit	The natural gas supply contract states that gas provided to LANL will be pipeline quality. The page from the contract containing this information is kept at the plant. Pipeline quality gas contains no more than 2 grains of total sulfur per 100 scf. Sulfur content in fuel oil is	1	Yes	

(PART 2)

Page 16 of 25

	••••••••••••••••••••••••••••••••••••••	······	Page 16 of 25		
Permit Term or Condition Identification No.	Method(s) or other information or other facts used to determine the compliance status	Data Collection Frequency continuous (C) or intermittent (I)	In Compliance? If so type a Yes. If not type a Dev and complete table entitled Deviation Reporting (Part 3)		
{1}	[2]	{3}	{4}		
·	checked/analyzed prior to or upon delivery to . verify it is less than 0.05% by weight.				
2.9.3.2 of the permit	A 365 day rolling total for both natural gas and fuel oil use is maintained and reviewed to verify usage does not exceed 2,000 MMscf and 500,000 gallons respectively. The rolling totals are provided in LANL's semi-annual monitoring report.	I	Yes		
2.9.4 Monitoring Req's 2.9.4.1 of the permit	Volumetric flow meters with correctors are in place at the facility. The correctors are periodically inspected and calibrated to maintain accuracy. The flow data from this meter is electronically collected daily.	Ι	Yes		
2.9.4.2 of the permit	Data on fuel oil use is electronically collected and calculated in a 365 day rolling total.	I	Yes		
2.9.4.3 of the permit	Due to recent changes put in place by NSR permit 2195BM1, this semiannual compliance stack test requirement is no longer valid. The new natural gas use limit is 2000 MMscf.	I	Yes		
2.9.4.4 of the permit	LANL has certified opacity readers on-site who perform opacity readings using 40 CFR 60, Appendix A, Method 9 to determine compliance with the opacity limitation.	I	Yes		
2.9.5 Recordkeeping 2.9.5.1 of the permit	Fuel oil use is tracked electronically daily and as a 365 day rolling total.	I	Yes		
2.9.5.2 of the permit	No deliveries to the plant were made in 2005. Sulfur content in fuel oil is checked/analyzed prior to or upon delivery to verify it is less than 0.05% by weight.	I	Yes		
2.9.5.3 of the permit An electronic record of natural gas use is maintained. This record includes a 365 c rolling total.		I	Yes		
2.9.5.4 of the permit	The natural gas supply contract states that gas provided to LANL will be pipeline quality. The page from the contract containing this information is kept at the plant. Pipeline quality gas contains no more than 2 grains of total sulfur per 100 scf.	· I	Yes		

	·		Page 17 of 25
Permit Term or Condition Identification No.	Method(s) or other information or other facts used to determine the compliance status	Data Collection Frequency continuous (C) or intermittent (I)	In Compliance? If so type a Yes. If not type a Dev and complete table entitled Deviation Reporting (Part 3)
[1]	{2}	{3}	[4]
2.9.6 Reporting 2.9.6.1 of the permit	Emissions and monitoring reports are submitted on a 6-month basis in accordance with permit conditions 4.1 and 4.2. LANL submitted monitoring reports to NMED on January 19, 2005 and August 10, 2005. Emissions reports were submitted to NMED on March 23, 2005 and September 15, 2005.	I	Yes
2.10 Rock Crusher			
2.10.1 – 2.10.6 of the permit	The Rock Crusher did not operate during calendar year 2005 and will be removed from the Title V Operating Permit during the next revision.	N/A	N/A
2.11 Facility Wide Emission Limits			
2.11.1 of the permit	Facility-wide actual emissions are calculated and compared with the facility-wide emission limits twice a year. Emission reports are submitted on a 6-month basis in accordance with permit condition 4.1. LANL submitted emission reports to NMED on March 23, 2005 and September 15, 2005.	I	Yes
2.11.2 of the permit	The LANL air quality group has a review process for construction and modification projects. This process identifies projects applicable to 20.2.72 NMAC.	1	Yes
8.0 Stratospheric Ozone			
8.1 Subpart F	A stratospheric ozone protection program is in place at LANL. LANL, through our maintenance subcontractor KSL, uses appropriately certified technicians and certified recycling and recovery equipment. KSL follows LANL procedures to demonstrate that required service practices found in 40 CFR 82.156 (Subpart F) are followed.	I	Yes

			Page 18 of 25
Permit Term or Condition Identification No.	Method(s) or other information or other facts used to determine the compliance status	Data Collection Frequency continuous (C) or intermittent (I)	In Compliance? If so type a Yes. If not type a Dev and complete table entitled Deviation Reporting (Part 3)
{1}	{2}	{3}	[4]
8.2 Subpart B	Motor vehicle air conditioners (MVAC) are serviced at LANL by KSL pursuant to 40 CFR part 82, subpart B. KSL technicians comply with EPA standards for servicing motor vehicle air conditioners.	I	Yes
8.3 Subpart H	KSL maintains LANL halon systems. KSL technicians comply with the standards for servicing and maintaining equipment containing halons pursuant to 40 CFR Part 82, Subpart H.	I	Yes
9.0 Open Burning	NMED issued NSR Permit No. 2195-K and 2195-J in March 2005 to replace the following Open Burn permits.		
TA-11-OB-2003	No open burning occurred at this site during calendar year 2005.	N/A	Yes
TA-14-OB-2003	No open burning occurred at this site during calendar year 2005.	N/A	Yes
TA-16-OB-2003	LANL maintains a burn log for TA-16 activities and provides NMED with an annual Fire Activity Report. LANL has continued to notify NMED before each burn as required in TA-16- OB-2003. An open burn notification for the week of December 19 th was not made prior to burning.	I	Dev
TA-36-OB-2003	No open burning occurred at this site during calendar year 2005.	N/A	Yes

	••••••••••••••••••••••••••••••••••••••		Page 19 of 25
Permit Term or Condition Identification No.	Method(s) or other information or other facts used to determine the compliance status	Data Collection Frequency continuous (C) or intermittent (I)	In Compliance? If so type a Yes. If not type a Dev and complete table entitled Deviation Reporting (Part 3)
[1]	{2}	{3}	{4}
10.0 Radionuclide NESHAPs			
0.1 Subpart H – Emissions of radionuclides other than radon from DOE facilities.	LANL has a radionuclide NESHAP team that is devoted to compliance with 40 CFR Part 61, Subpart H (Emissions of radionuclides other than radon from DOE facilities). The EPA limit for radionuclide emissions, corresponding to a maximum off-site dose of 10 millirem per year. Emissions from 2005 resulted in approximately 7 millirem off-site. The annual report summarizing 2005 emissions will be issued before June 30, 2006. The 2004 report, LA- 14233, is available on the ENV-MAQ web site (http://www.airquality.lanl.gov/pdf/RadAir/ LA-14233_NoMaps.pdf). In 2005, emissions from 28 stacks were continuously monitored. Also, LANL evaluated emissions from over 50 non-monitored sources and operated 18 ambient air monitoring stations to meet Subpart H requirements.	Yes	
10.2 Subpart Q – Emissions of radon from DOE facilities.	LANL has a radionuclide NESHAP team that is devoted to compliance with 40 CFR Part 61, which includes compliance with Subpart Q (emissions of radon from DOE facilities). LANL operations do not meet the criteria described in Subpart Q which require compliance with this standard. EPA Region 6 has confirmed this with LANL and the NMED at the Title V Open House Feb. 25, 2003.	1	Yes

(PART 2)

Page 20 of 25

Permit Term or Condition Identification No.	Method(s) or other information or other facts used to determine the compliance status	Data Collection Frequency continuous (C) or intermittent (I)	In Compliance? If so type a Yes. If not type a Dev and complete table entitled Deviation Reporting (Part 3)	
{1} 11.0 Asbestos NESHAP	[2]	(3)	[4]	
11.1 Subpart M	LANL has a program in place to meet the requirements found in the Asbestos NESHAP standard 40 CFR Part 61, Subpart M. LANL submitted quarterly reports to NMED during 2005 summarizing asbestos activities and provided asbestos notifications as required. NMED routinely performs inspections of asbestos work at LANL.	I	Yes	

Instructions to Operating Permits Annual Compliance Certification

(PART 2 Instructions)

Page 21 of 25

Annual Compliance Certification Data Element:

- 1. Identify each Permit Term or Condition Identification No. that is the basis of certification. The responsible official may restate permit terms and emission units or cross-reference the relevant terms and conditions of the permit, previous compliance reports, or other applicable documentation in order to satisfy this requirement.
- 2. Identify method(s) or other information used to determine compliance status of each term and condition of a permit. The responsible official is to identify monitoring and/or testing methods for each emission unit and its associated applicable requirement. The certification may cross-reference the permit, previous compliance reports, or other applicable documentation in order to satisfy this requirement. The certification should be clear as to what the unit's requirements and methods used to determine compliance status are. The certification should identify other material information that has been assessed in relation to how the information potentially affects the source's compliance status during the certification period.¹
- 3. Identify whether the method(s) or other means identified above provide continuous or intermittent data. The responsible official must identify whether the methods or other means used for determining the compliance status provide continuous or intermittent data. If the owner or operator uses cross-referencing to identify the methods or other information used to determine the source's compliance status, the certification must clearly indicate whether the cross-referenced information provides continuous or intermittent data.
- 4. Identify the compliance status of each term and condition of the permit using the method(s) or other means identified in data element 2. In *data element* 2, the responsible official identified whether the compliance determination methods provide continuous or intermittent data. Based on those methods and other material information, the responsible official must identify the compliance status of each permit term and condition. The certification requires the responsible official to certify compliance with each permit term or condition. If the facility or emissions unit has been in compliance with the permit term or condition, type in yes in the box. If however, the facility or emission unit(s) have deviated from the permit term or condition type "Dev" and complete the next table entitled "Deviation Reporting" (Part 3).

In identifying the compliance status of each term and condition of the permit, a source shall certify intermittent

¹ If a source becomes aware of other material information that indicates that an emission unit has experienced deviations (as that term is defined in State programs) or may otherwise be out of compliance with an applicable requirement even though the unit's permit-identified data indicates compliance, the source must consider this information, identify and address it in the compliance certification, and certify accordingly. See, e.g., 62 FR 8314, 8320 (Feb. 24, 1997). Sources may not ignore obvious relevant information and risk making a false certification, omitting material information, or otherwise violating prohibitions on fraud.

Instructions to Operating Permits Annual Compliance Certification

(PART 2 Instructions)

Page 22 of 25

compliance when basing its certification on methods or other information providing intermittent data, and on methods or other information providing continuous or intermittent data, which identifies any deviation, exceedance or excursion. A source may certify continuous compliance when basing its certification on methods or other information providing continuous data but not indicating deviations, exceedances or excursions from those permit terms or conditions. EPA does not interpret a certification of intermittent compliance to necessarily mean that the responsible official is certifying periods of noncompliance.

(PART 3)

Page 23 of 25

Deviation Reporting	
Question	Responds (Yes/No)
Are there any deviations being reported with this annual compliance certification. If yes complete the table entitled "Deviation Summary Report" (Part 4).	Yes
Have there been any previous deviation reports (ie. Region 6 Operating Permits Deviation Summary Report) forwarded to the EPA. If yes, attach the Deviation Summary Report to this annual compliance certification or complete the table entitled "Deviation Summary Report" (Part 4).	No
Have all quarter or semiannual deviation reports been submitted to NMED? If yes Part 4 does not need to be included on your submittal to state. However it is required for the EPA's review.	N/A

Deviation Summary Report

Page 24 of 25

De	viation Re	eport					Pe	rmit No. <u>P10(</u>			
No	Emission Unit ID	Poll	Poll Applicable Requirement Monitoring Method Monitoring Freq (Include Rule Citation) (Include Rule Citation) (Include Rule Citation) (Include Rule Citation)				quency	Total # of Deviations			
1	TA-3 Power Plant	NOx	Permit condition 2.9.2, allowable hourly emission limit, NOx Open Burn permit TA-16-OB-2003			Flue Gas Recirculation (FGR) System is monitored continuously in the Power Plant control room	FGR operates c maintain allowa	ontinuously to ble emission limits	1		
2	TA-16 Open Burn	N/A	Open Burn per issued Decemb March 18, 200	er 27, 2002	; modified	Prior notification	Weekly		1		
No	Deviation	Started	Deviation Date	Ended	# of Days	Cause of Deviation		Corrective Action T	'aken		
1	1/19/2005	06:45	1/19/2005	17:00	1 1	This excess emission resulted from a test performed on the boiler #1 to determine if the Flue Gas Recirculation (FGR) system is a causal factor in the inability of the boiler to reach loads greater than 35% without affecting the superheater temperatures. To perform this test, the FGR system was intentionally turned off.			a was intentionally is test. After the test was FGR system was test was pre-approved nuary 11, 2005.		
2	12/16/2005	N/A	N/A	N/A	N/A	Weekly notification of open burn act made prior to burn.	ivity was not	concerning the statu permit TA-16-OB-2 indicated in a letter 19, 2003 that LANI operating under the	to LANL on August		

Report	
Summary	(PART 4)
Deviation	

Page 25 of 25	72 application. NMED issued LANL	NSR Permit No. 2195-J in March 2005	for TA-16 flash pad operations	(operations previously covered under	open burn permit). Weekly notifications	to NMED are not required under NSR	Permit No. 2195-J. LANL has since	requested that NMED officially cancel	open burn permit TA-16-OB-2003.

LA-UR-06-556

Version: 6/18/2002

•