RE LANL TA-16 EN Air Quality Permit.

State of New Mexico
ENVIRONMENT DEPARTMENT
Air Quality Bureau
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DEPUTY SECRETARY

CERTIFIED MAIL NO. 7001 2510 0001 2015 4700
RETURN RECEIPT REQUESTED

Permittee:

US Department of Energy
Los Alamos National Laboratory
P.O. Box 1663, MS J978
Los Alamos, New Mexico 87545

NSR Air Quality Permit No. 2195-K
DX-TA-36 Sled Track
AIRS No. 35-028-0001
AI No. 856 PRN-20040003

Company Official:

Ms. Jean Dewart
Group Leader

Sandra Ely
Bureau Chief
Air Quality Bureau

MAR 2 9 2005
Date of Issuance

Air Quality Permit No. **2195-K** is issued by the Air Quality Bureau of the New Mexico Environment Department (Department) to Los Alamos National Laboratory ("LANL") pursuant to the Air Quality Control Act (Act) and regulations adopted pursuant to the Act including Title 20, New Mexico Administrative Code (NMAC), Chapter 2, Part 72, (20 NMAC 2.72), Construction Permits, Subpart II and is enforceable pursuant to the Act and the air quality control regulations applicable to this source.

This permit authorizes the construction and/or operation of the LANL Dynamic Experimentation ("DX") Division Sled Track located at Technical Area ("TA") – 36. The function of the facility is to

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test and evaluate simulated accident scenarios involving transportation containers of High Explosive materials ("HE") and depleted uranium using a sled track. The accident scenarios may generate emissions from open burning of HE, wood and depleted uranium materials. This facility is located in Township 18 North, Range 6 East, Section 1, approximately four miles south of Los Alamos, New Mexico in Los Alamos County.

The Department has reviewed the permit application for the proposed construction and has determined that the provisions of the Act and ambient air quality standards will be met. Conditions have been imposed in this permit to assure continued compliance. 20 NMAC 2.72, Section 210.D, states that any term or condition imposed by the Department on a permit is enforceable to the same extent as a regulation of the Environmental Improvement Board.

TOTAL EMISSIONS

The total potential emissions from this facility, excluding exempted activities, are shown in the following table. Emission limitations for individual units are shown in Specific Condition 2.

Total Potential Criteria Pollutant Emissions from Entire Facility (for information only, not an enforceable condition):

Pollutant	**Emissions** (tons per year)
Nitrogen Oxides (NOx)	<1
Carbon Monoxide (CO)	1
Volatile Organic Compounds (VOC)	1
Particulate Matter – 10 (PM_{10})	<1
Sulfur Oxides – (SOx)	<1

SPECIFIC CONDITIONS

Pursuant to 20 NMAC 2.72, and the specific regulatory citations in parenthesis, the facility is subject to the following conditions.

1. Construction and Operation
(20 NMAC 2.72, Section 210.A, 210C,)

a) The equipment regulated by this permit consists of

Table 1.1: Regulated Equipment List

Unit No.	Unit Description	Serial No.	Capacity	Manufacture Date	Other
ST-1	Sled Track	NA	NA	NA	NA

b) This facility is authorized to conduct eight transportation accident scenarios per calendar year using the sled track. Each test shall take place no earlier than three hours after sunrise and shall be completed no later than one hour prior to sunset. The eight tests may occur on any day or week during a given calendar year.

c) This facility is subject to all applicable requirements including, but not limited to, the following regulations:

Table 1.2: Applicable Requirements

Citation	Title
20 NMAC 2.3	Ambient Air Quality Standards
20 NMAC 2.70	Operating Permits
20 NMAC 2.71	Operating Permit Fees
20 NMAC 2.72	Construction Permits
20 NMAC 2.73	NOI & Emissions Inventory Requirements
20 NMAC 2.75	Construction Permit Fees
40 CFR Part 61, Subpart H	NESHAP at 40 CFR Part 61, Subpart H applies. However, USEPA Region VI is the Administrator of this rule at LANL.

d) For each scenario, LANL shall burn no more than 2000 pounds of clean wood, 99 pounds of HE material and 88 lbs of depleted uranium.

e) Maximum burn time for each test shall not exceed the lesser of eight hours per day or the number of hours necessary to be compliant with permit condition 1(b).

f) Wood used in conjunction with the sled track shall be clean wood in the form of hard lumber which has not been painted or treated and does not include wood waste or processed wood material such as plywood or particle board.

2. Emission Limits (20 NMAC 2.72, Sections 210.A and 210.B.1.b)

Table 2.1: Allowable Emissions

Unit No	TSP		PM10		NOx[1]		CO		VOCs		SO_x	
	pph	tpy[2]	pph	tpy	pph	tpy	pph	tpy	pph	tpy	pph	tpy
ST-1	21.8	0.2	21.8	0.2	5.0	0.04	127.7	1.0	114.5	1.0	0.2	0.002

[1] Nitrogen dioxide emissions include all oxides of nitrogen expressed as NO_2

[2] Annual emissions calculated based on the assumption that fire will last two hours instead of eight.

3. Monitoring Requirements
(20 NMAC 2.72, Section 210.B.4, 20 NMAC 2.72)

a) LANL shall monitor each sled track transportation accident scenario to ensure that associated open burning activities meet the requirements specified by this permit in condition 1 above.

4. Recordkeeping
(20 NMAC 2.72, Sections 210.B.4, and 210.D)

a) LANL shall generate and maintain records necessary to demonstrate compliance with permit conditions 1(b) & (d-f).

5. Reporting
(20 NMAC 2.72, Sections 210.B and 210.E, and 212)

a) Concurrent with the semi-annual reports of its Title V permit, LANL shall submit a report of open burning activities authorized by this permit. The report shall include: the date of each open burn, type and quantities of materials burned, the time each burn was initiated, duration of each burn and the time when the burning was completed. LANL may include this information within one (1) report that includes other open burn sites.

b) LANL shall notify NMED's Air Quality Bureau Enforcement Section in writing of the week open burning is scheduled to occur using the sled track no later than two weeks prior to the scheduled week. LANL shall provide a second written notification with the date and time open burning is scheduled to occur no later than forty-eight (48) hours prior to the burn. This will facilitate NMED's ability to conduct inspections to determine compliance with this permit.

6. Compliance Test
(NMAC 2.72, Section 210.C, 213)

a) Initial compliance tests are not required on Unit ST-1. Compliance test requirements from previous permits (if any) are still in effect, unless the tests have been satisfactorily completed. Compliance tests may be re-imposed if it is deemed necessary by the Department to determine whether the source is in compliance with applicable regulations or permit conditions.

cc: Section Chief, Compliance and Enforcement Section, AQB, Santa Fe
Los Alamos NMED DOE Oversight Bureau

Enclosure: Industry/Consultant Feedback Questionnaire with envelope

GENERAL CONDITIONS

1. Reporting
(20 NMAC 2.72, Sections 210.B and 210.E, and 212)

a) The Permittee shall notify the Department in writing of or provide the Department with:

i) the anticipated date of initial startup of each new or modified source not less than thirty (30) days prior to the date;

ii) the equipment serial number and the actual date of initial startup of each new or modified source within fifteen (15) days after the startup date;

iii) the date when each new or modified emission source reaches the maximum production rate at which it will operate within fifteen (15) days after that date;

iv) any change of operators within fifteen (15) days of such change;

v) any necessary update or correction no more than sixty (60) days after the operator knows or should have known of the condition necessitating the update or correction of the permit.

2. Revisions and Modifications
(20 NMAC 2.72, Sections 200.A.2, 210.B.4, and 200.E)

Any future physical changes or changes in the method of operation may constitute a modification as defined by 20 NMAC 2.72, Construction Permits. Unless the source or activity is exempt under 20 NMAC 2.72, Section 202, no modification shall begin prior to issuance of a permit.

Changes in plans, specifications, and other representations stated in the application documents shall not be made if they cause a change in the method of control of emissions or in the character of emissions, or will increase the discharge of emissions. Any such proposed changes shall be submitted as a revision or modification.

Modifications or revisions to this permit shall be processed in accordance with 20 NMAC 2.72.

3. Notification to Subsequent Owners
(20 NMAC 2.72, Sections 107.M.1, 210.B.4, and 212.C)

The permit and conditions apply in the event of any change in control or ownership of the facility. No permit modification is required in such case. However, in the event of any such

change in control or ownership, the permittee shall notify the succeeding owner of the permit and conditions and shall notify the Department of the change in ownership within fifteen (15) days of that change.

Any new owner or operator shall notify the Department, within thirty (30) days of assuming ownership, of the new owner's or operator's name and address.

4. Right to Access Property and Review Records
(20 NMAC 2.72, Sections 210.B and 210.E, and 20 NMAC 2.73)

The Department shall be given the right to enter the facility at all reasonable times to verify the terms and conditions of this permit. The company, upon either a verbal or written request from an authorized representative of the Department, shall produce any records or information necessary to establish that the terms and conditions of this permit are being met.

5. Posting/Retention of the Permit
(20 NMAC 2.72, Section 210.B.4)

A copy of this permit shall be posted at the plant site or retained at the plant site at all times and shall be made available to Department personnel for inspection upon request.

6. Permit Cancellations
(20 NMAC 2.72, Section 211)

a) The Department shall automatically cancel any permit for any source which ceases operation for five (5) years or more, or permanently. Reactivation of any source after the five (5) year period shall require a new permit.

b) The Department may cancel a permit if the construction or modification is not commenced within two (2) years from the date of issuance or if, during the construction or modification, work is suspended for a total of one (1) year.

7. Unless modified by conditions of this permit, the applicant shall construct or modify and operate the facility in accordance with all representations of the application and supplemental submittals that the Department relied upon to determine compliance with applicable regulations and ambient air quality standards. If the Department relied on air quality modeling to issue this permit, any change in the parameters used for this modeling shall be submitted to the Department for review. Upon the Department's request, the applicant shall submit additional modeling for review by the Department. Results of that review may require a permit modification. (20 NMAC 2.72, Section 210.A)

8. During any asbestos demolition or renovation work CFR Title 40, Part 61, Subpart M (NESHAP) does apply. (20 NMAC 2.72, Section 210.A)

9. For engines or turbines equipped with catalytic converters and/or air fuel ratio controllers, or similar device which performs the same function of maintaining appropriate air and fuel ratios, records shall be made and maintained by the owner or operator for a period of at least two (2) years from the date of generation and a summary of quarterly reports shall be submitted to the Department annually, which:

   a) For each air fuel ratio (AFR) controlling type device, demonstrate that the manufacturer's or supplier's recommended maintenance is performed, including replacement of oxygen sensor as necessary for oxygen-based controllers. Verification of proper operation of the controller shall be demonstrated at least quarterly by measuring and recording exhaust oxygen or NO_x concentrations with a properly calibrated portable analyzer as specified in the most current version of the SOP for "Use of Portable Analyzers in Performance Tests".

   b) For any engine equipped with a catalytic converter, demonstrate the maintenance of the NO_x and CO reduction efficiency across the catalyst bed. This test shall be performed within ninety (90) days following initial startup and on a quarterly basis thereafter, unless an alternative testing schedule is specified by the department. Properly calibrated portable analyzers are acceptable for this demonstration. The test shall be conducted at ninety percent (90%) or greater of full load and shall include the exhaust volume flow rate (dscf) and the NOx and CO emission rate (lb/hr). (20 NMAC 2.72, Section 210.B(4).

10. For engines equipped with catalytic converters, the engine shall not be operated without the catalytic converter, specifically including catalyst maintenance periods. During periods of catalyst maintenance, the permittee shall either (1) shut down the engine(s); or (2) replace the catalyst with a functionally equivalent spare to allow the engine to remain in operation.

11. Flares used to comply with the NSPS (e.g. Subpart GGG, KKK and VV) requirements for VOC shall be tested in accordance with the requirements contained in 40 CFR 60, Subpart A, General Provisions, paragraph 60.8 (performance tests) and 60.18 (general control device requirements).

12. Except as provided in the Specific Conditions, records shall be maintained on-site for a minimum of two (2) years from the time of recording and shall be made available to Department personnel upon request. (20 NMAC 2.72, Sections 210.B.4, and 210.D)

13. If this permit requires any compliance testing, the owner or operator shall notify the Department at least thirty (30) days prior to the test date and allow a representative of the

Department to be present at the test. The permittee shall submit a testing protocol to the Department at least thirty (30) days prior to the test date and shall observe the following testing procedures:

a) The test protocol and compliance test report shall conform to the standard format specified by the Department. The most current version of the format may be obtained from the Enforcement and Compliance Section of the Air Quality Bureau.

b) For combustion sources with stacks, the permittee shall also provide a one-quarter (1/4) inch stainless steel sampling line adjacent to the sampling ports and extending down to within four (4) feet above ground level to provide access for future audits. The line shall extend into the stack a distance of 1/4 the stack diameter, but not less than one inch from the stack wall. The sampling line shall be maintained clear of blockage at all times. This line shall be in place at the time of any required compliance tests. For any source for which compliance tests are not required or for previously existing sources this line shall be installed no later than one hundred and eighty (180) days from the date of this permit.

c) As an alternative, the owner or operator may provide a portable sampling line that is readily available which allows the Department to safely obtain representative stack gas samples at the time of compliance audits or site inspections.

d) See 2.72, Section 210.C for stack sampling platform requirements and access to sampling ports. (20 NMAC 2.72, Sections 210.B.4, and 210.D)

ADDITIONAL REQUIREMENTS

Applications for permit revisions and modifications shall be submitted to:

Program Manager, Permits Section
New Mexico Environment Department
Air Quality Bureau
2048 Galisteo
Santa Fe, New Mexico 87505

Compliance test protocols, regularly scheduled reports, a copy of the test results, and excess emission reports, shall be submitted to:

Program Manager, Compliance and Enforcement Section
New Mexico Environment Department
Air Quality Bureau
2048 Galisteo
Santa Fe, New Mexico 87505

REVOCATION

The Department may revoke this permit if the applicant or permittee has knowingly and willfully misrepresented a material fact in the application for the permit. Revocation will be made in writing, and an administrative appeal may be taken to the Secretary of the Department within thirty (30) days. Appeals will be handled in accordance with the Department's Rules Governing Appeals From Compliance Orders.

APPEAL PROCEDURES

20 NMAC 2.72, Section 207, provides that any person who participated in a permitting action before the Department and who is adversely affected by such permitting action, may file a petition for hearing before the Environmental Improvement Board. The petition shall be made in writing to the Environmental Improvement Board within thirty (30) days from the date notice is given of the Department's action and shall specify the portions of the permitting action to which the petitioner objects, certify that a copy of the petition has been mailed or hand-delivered and attach a copy of the permitting action for which review is sought. Unless a timely request for hearing is made, the decision of the Department shall be final. The petition shall be copied simultaneously to the Department upon receipt of the appeal notice. If the petitioner is not the applicant or permittee, the petitioner shall mail or hand-deliver a copy of the petition to the applicant or permittee. The Department shall certify the administrative record to the board. Petitions for a hearing shall be sent to:

Environmental Improvement Board
1190 St. Francis Drive, Runnels Bldg.
P.O. Box 26110
Santa Fe, New Mexico 87502