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DEFENSE NUCLEAR FACILITIES SAFETY BOARD

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November 29, 2005

The Honorable Linton Brooks
Administrator
National Nuclear Security Administration
U.S. Department of Energy
1000 Independence Avenue, SW
Washington, DC 20585-0701

Dear Ambassador Brooks:

The Defense Nuclear Facilities Safety Board (Board) was briefed on November 21, 2005, by the National Nuclear Security Administration's (NNSA) Deputy Administrator for Defense Programs and the manager of NNSA's Los Alamos Site Office (LASO) on a 3-month "strategic pause" that began that day at LASO. The Board was informed that this pause is considered necessary for NNSA to reengineer oversight policies and procedures in preparation for the transition to a new prime contractor for management and operation of Los Alamos National Laboratory (LANL). Approximately two-thirds of LASO's workforce is being devoted to the reengineering effort during the pause, leaving the remaining third to oversee laboratory operations. No corresponding reduction in hazardous activities at LANL is planned. As a compensatory measure, LASO has tasked LANL to increase its own internal self-assessment for an indefinite period of time.

The Board believes that LASO's retreat from its federal oversight responsibilities is inappropriate and gives rise to safety vulnerabilities at LANL. Three fundamental issues lie at the heart of the Board's concern:

1. A substantial reduction in NNSA oversight is occurring coincident with the transition to a new management and operating contractor team for the laboratory, and at a time when a number of safety issues are being addressed at LANL.
2. A substantial reduction in NNSA oversight is likely to delay time-urgent risk reduction activities at LANL.
3. The shifting of safety oversight to the contractor is directly counter to the Board's Recommendation 2004-1, *Oversight of Complex, High-Hazard Nuclear Operations*, accepted by the Secretary of Energy in his letter of July 21, 2004.

Timing of Substantial Reduction in Oversight—The award of the recently competed contract for management and operation of LANL is expected to be announced in early December 2005, and contract transition activities are planned to take place during the following

6 months. Continued federal engagement is pivotal to setting expectations for the new contractor management team and to ensuring that the LANL workforce stays focused on continued safe operations during the contract transition, a period when heightened attention to safety is needed. Also, the laboratory is currently pursuing the resolution of a large number of corrective actions to address safety deficiencies identified during the recent laboratory shutdown. This represents a significant effort that requires continued support and oversight from NNSA, especially as the effort is being transferred to a new contractor team.

Time-Urgent Risk Reduction—The reduction in federal oversight is likely to weaken the emphasis on accomplishing a number of key, time-sensitive risk reduction activities at LANL. Without consistent federal emphasis, vital activities such as the examples listed below may flounder as LANL enters the planned 6-month contract transition period:

- Implementation of the extensive corrective actions developed during the July 2004 to February 2005 suspension of activities at LANL, with emphasis on the Integrated Work Management effort that is essential for improving activity-level safety at the laboratory as noted in the Board's letter of July 21, 2005.
- Completion of the plutonium-238 cleanup in Room 201B and the initiation of pyrolysis of rags containing plutonium-238.
- Shipment of high-activity transuranic wastes to the Waste Isolation Pilot Plant.
- Repair or replacement of failed equipment in the radioactive waste facilities.

Recommendation 2004-1 Implications—Recommendation 2004-1 stressed the need to maintain the capability for examining, assessing, and auditing by all levels of the Department of Energy organization. The strategic pause drastically reduces LASO's capability to perform these essential federal responsibilities. Specific safety oversight activities affected by the pause include the monitoring of LANL operations by facility representatives, safety basis review and approval actions, safety system oversight functions, and project oversight for activities such as the design of the Chemistry and Metallurgy Research Replacement Facility.

LASO has directed LANL to compensate for the reduction in federal presence by devoting additional resources to self-assessment during the pause. The Board has previously objected to shifting safety oversight to the contractor in Recommendation 2004-1, and in comments provided in a January 5, 2005, letter on the draft Request for Proposal for the LANL contract. In both of these cases, the Board was assured that NNSA would maintain robust oversight of nuclear safety.

Furthermore, although its focus remains on defense nuclear facilities, the Board notes that there will be little or no federal safety oversight during the pause of lower hazard nuclear activities or hazardous non-nuclear activities. There will also likely be no additional contractor

self-assessments of these activities. Lower hazard nuclear activities and hazardous non-nuclear activities have been the source of several safety incidents at LANL in the recent past.

It does not appear that NNSA thoroughly considered the issues summarized above before authorizing the strategic pause at LASO. In particular, NNSA has not explicitly evaluated the safety risks of the pause. While the Board understands the need to reengineer LASO's oversight policies and procedures, it is not clear that the benefits outweigh the risks of such a drastic reduction in oversight at this time.

The Board does not agree that a strategic pause of oversight by LASO as described above is consistent with the safe operation of LANL. If NNSA believes that this course of action must be pursued, the Board requires information regarding how the issues described above will be addressed, as well as how effective federal safety oversight will be maintained for the more significant defense nuclear activities to be pursued during this period (listed in the enclosure to this letter). In particular, information is needed regarding the risk mitigation strategy during the pause, assistance to be provided through external expertise, and details of the additional self-assessments to be conducted by LANL. Pursuant to 42 U.S.C. § 2286b(d), the Board requests this information be provided in the form of a briefing by senior NNSA officials within 1 week of receipt of this letter.

Sincerely,



A. J. Eggenberger
Chairman

c: Mr. Thomas P. D'Agostino
Mr. Edwin L. Wilmot
Mr. Mark B. Whitaker, Jr.

Enclosure

ENCLOSURE

Operations Requiring a High Order of Federal Oversight

TA-55 Plutonium Facility

- Plutonium-238 Full-Scale Aqueous Scrap Processing line start up.
- Bench-scale scrap recovery line resumption.
- Completion of clean-up of plutonium-238 in Room 201B, and initiation of pyrolysis.
- General fissile materials operations.
- The building leak-path issue. (Although compensatory measures are in place, satisfactory resolution in a timely manner is required.)

Waste Operations at TA-54 Area G and TA-50

- Quick-to-Waste Isolation Pilot Plant operations.
- Management, operations, and procedures that are undergoing significant restructuring.
- Safety issues at the Radioactive Liquid Waste Treatment Facility involving leaking tanks.

TA-18

- Continuing material moves.
- Any hand-stacking and/or criticality operations.

Issues Common to Various Defense Nuclear Facilities

- Establishing expectations for the in-coming contractor management team and ensuring continued focus on safe operation.
- Disposition of positive Unreviewed Safety Questions and Potentially Inadequate Safety Analyses.
- Continuation of initiative to improve Integrated Work Management.
- Hazardous work-for-others.
- Ability to respond to operational events/conditions/etc.