



**Department of Energy**  
**National Nuclear Security Administration**  
Washington, DC 20585

**June 19, 2009**

The Honorable A. J. Eggenberger  
Chairman  
Defense Nuclear Facilities Safety Board  
625 Indiana Avenue, N.W., Suite 700  
Washington, D.C. 20004

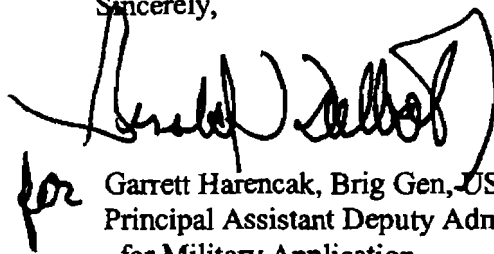
Dear Mr. Chairman:

This letter is in response to your request regarding Fire and Emergency Response Capabilities at Los Alamos National Laboratory (LANL) dated December 8, 2008. You requested both a 90-day and 180-day report on the Cooperative Agreement between Los Alamos County and the National Nuclear Security Administration (NNSA). Both reports were conditioned on the completion of the Baseline Needs Assessment (BNA) in December 2008.

In a letter dated March 10, 2009, NNSA committed to provide the Board the BNA summary by June 2009 because the BNA was not scheduled to be completed until March 31, 2009. The attached memo completes the response for the 90-day report.

If you have any questions, please contact Mr. James McConnell, Director, Office of Safety, at (202) 586-4379.

Sincerely,



for Garrett Harencak, Brig Gen, USAF  
Principal Assistant Deputy Administrator  
for Military Application  
Office of Defense Programs

**Enclosures**

cc: M. Whitaker Jr., HS-1.1



# memorandum

National Nuclear Security Administration  
Los Alamos Site Office  
Los Alamos, New Mexico 87544

DATE: **MAY 19 2009**  
REPLY TO  
ATTN OF: SO: 25BG-46295  
SUBJECT: Los Alamos National Laboratory (LANL) Baseline Needs Assessment (BNA) Summary


TO: Brigadier General Garrett Harencak, Deputy Administrator for Defense Programs,  
NA-10, HQ/FORS

Reference: NNSA memorandum from D. Winchell to W. Ostendorff, *Los Alamos National Laboratory (LANL) Fire and Emergency Response Improvements*, February 14, 2009.

In a letter dated December 8, 2008, the Defense Nuclear Facilities Safety Board (DNFSB) expressed concerns regarding the alignment of Los Alamos County Fire Department services with the unique fire protection needs at Los Alamos National Laboratory (LANL). Los Alamos Site Office (LASO) responded in the Reference and committed to providing a summary of the latest Baseline Needs Assessment (BNA) by May 29, 2009.

Attached is a summary of the LANL Baseline Needs Assessment (BNA), which was submitted for LASO approval on April 29, 2009 and approved on May 19, 2009. In accordance with the Reference, by September 25, 2009, LASO will provide a detailed report regarding implementation plans, schedules, funding sources, and progress towards fully implementing the BNA.

Please contact C. Keilers at (505) 665-6352 or W. Gentile at (505) 667-5828 with any questions.



Donald L. Winchell Jr.  
Manager

cc:  
S. Steele, NA-1, HQ/FOR  
L. Walker, NA-43, HQ/GTN  
R. Snyder, OOM, LASO  
C. Keilers, FO, LASO  
F. Bell, FO, LASO

cc: Continued on page 2

B. Gentile, SO, LASO  
J. Vozella, SO, LASO  
R. McQuinn, AD-NHHO, LANL, MS-K778  
M. Lansing, AD-SS, LANL, MS-G729  
J. Streit, ESHQ, LANL, MS-K491  
R. Farris, OS-FP, LANL, MS-K493  
A. Stanford, EO-DO, LANL, MS-C938  
Records Center, LASO  
Official Contract File, LASO

Attachment: Summary of the 2009 Baseline Needs Assessment

The 2009 Baseline Needs Assessment (BNA) for the Los Alamos National Laboratory (LANL) was performed to assess the needs of the Laboratory in the area of fire protection emergency response services. Applicable Department of Energy (DOE) criteria, notably DOE Order 420.1B, *Facility Safety*, and applicable NFPA codes and standards were utilized to evaluate the capability of the fire protection and hazardous material emergency response organizations to provide effective response to suppress all fires, capabilities of emergency medical and hazardous materials response; and staffing apparatus, facilities, equipment, training, pre-plans, offsite assistance, and procedures. In the previous 2004 BNA, both the needs of Los Alamos County and the Laboratory were considered whereas in the 2009 document, only the needs of the Laboratory are considered.

The 2009 LANL BNA includes 15 recommendations for meeting the objectives and expectations of the applicable requirements and criteria, while providing for disposition of the recommendations documented in the previous needs assessment. The recommendations involve the following:

- 1) Development of a Fire Department baseline response directive specific to LANL
- 2) Station 1 replacement and relocation
- 3) Upgrading priority of maintenance for Station 1 and 5
- 4) Ensuring two paramedics can be deployed for medical emergencies
- 5) Submittal of an equivalency in order to account for discrepancies in fire suppression and emergency medical response time objectives as designated in National Fire Protection Association (NFPA) 1710
- 6) Incorporation of access and set-up time improvements in Pre-Incident Plan process
- 7) Tracking and trending of response times
- 8) Establishment of a mutual aid agreement to address the LANL Hazardous Material (HAZMAT) Team and Los Alamos Fire Department (LAFD) integration
- 9) Addition LAFD personnel trained at the HAZMAT Technician level to improve off-hour response capability for LANL
- 10) Process to required LAFD response for all LANL HAZMAT Team deployments
- 11) A means to meet the BNA staffing determination of 24 firefighting and emergency medical personnel
- 12) The establishment of an appropriate vehicle and equipment replacement schedule
- 13) Station 5 replacement and relocation
- 14) Pre-Incident Plans and strategy development for unique LANL hazardous operations and configurations
- 15) Increase in LAFD and Laboratory exercise and drill frequency

Resolution of these recommendations should aid LANL in ensuring that key objectives of DOE Order 420.1B are met, including effective response to suppress all fires; emergency medical and hazardous materials response capabilities; and the establishment of appropriate staffing, facilities, pre-incident plans, offsite assistance, and procedures.

The BNA concluded that the LAFD currently has an organization consistent with the requirements of the NFPA 1710 standard. The LAFDs service delivery objectives (as defined in

the Cooperative Agreement), its basic organizational structure, and the functions that the fire department members are expected to perform are effectively delineated in their LAFD fire chief directives. However, these service delivery objectives do not encompass the objectives of DOE 420.1B in its entirety, nor have they been tailored to fully define the response necessary for potential, unique incidents at the Laboratory. This is reflected in the recommendations. The many deliverables called out in the Cooperative Agreement have provided for meaningful gains in LAFD training, capabilities, facility knowledge, and response expectations since its inception. Resolution of BNA documented recommendations will provide for additional improvements in meeting DOE Order and NFPA standard requirements for fire suppression, emergency medical and hazardous material responses.

The National Nuclear Security Administration and LANL will properly disposition each BNA cited recommendation and ensure that associated corrective actions are tracked to closure in the LANL Issue Management Tracking System.