



**Department of Energy**  
**National Nuclear Security Administration**  
Washington, DC 20585  
May 21, 2003

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DNE SAFETY BOARD  
OFFICE OF THE ADMINISTRATOR

The Honorable John T. Conway  
Chairman  
Defense Nuclear Facilities Safety Board  
625 Indiana Avenue, NW, Suite 700  
Washington, D.C. 20004-2901

Dear Chairman Conway:

This response addresses your letter dated March 7, 2003, outlining flood mitigation measures taken by the National Nuclear Security Administration and the University of California Los Alamos National Laboratory to protect our Defense Nuclear Facility at Technical Area 18 after the Cerro Grande Fire. It is true that vegetation recovery of the severely burned areas surrounding Technical Area 18 and the associated area of the Flood Retention Structure is occurring slower than anticipated, primarily because of drought conditions prevailing in the general area of Los Alamos and the surrounding U.S. Forest Service property. It is expected that over the next several years, soil conditions will gradually return to conditions similar to pre-fire conditions and that the flood potential will diminish.

During and after the Cerro Grande Fire, Technical Area 18 operations and safety basis were evaluated to address the increased risk from the flood potential in the vicinity. This resulted in the Los Alamos Site Office approving a Facility-Specific Positive Unreviewed Safety Question on May 29, 2001. The approval was based on the Los Alamos National Laboratory meeting conditions that were directed to enhance the safety basis of the facility through development of maintenance and inspection procedures for the Flood Retention Structure; modification of the Technical Area 18 Emergency Preparedness Plan; hydrologic modeling and annual reporting to the National Nuclear Security Administration; and, completion of erosion control measures in Pajarito Canyon.

Preliminary results of the roller-compacted concrete testing and structural adequacy of the Flood Retention Structure were discussed with members of the Board staff on December 5, 2002. The Los Alamos Site Office received the final concrete report from the U.S. Army Corps of Engineers on April 11, 2003. This report documents the details of construction and related engineering activities that transpired in the construction of the Flood Retention Structure and confirms that post-construction structural properties of the roller-compacted concrete are well beyond the design assumptions and parameters used to construct the Flood Retention Structure. A copy of the final concrete report has been forwarded to your staff.



In order to address the issues raised in your letter, the National Nuclear Security Administration will continue to assess the change in hydrologic conditions, and Los Alamos National Laboratory will continue monitoring precipitation and flow conditions in the area of Technical Area 18 operations. Although this activity was funded through fiscal year 2003 by Cerro Grande appropriations, the operating division at Los Alamos National Laboratory (NIS-DO) will ensure continuance of the hydrologic modeling beyond fiscal year 2003 for as long as needed to protect defense nuclear facilities. The Office of Facility Operations at the Los Alamos Site Office will ensure that maintenance and inspection procedures are implemented, the Technical Area 18 Emergency Preparedness Plan is updated based on changing conditions, and the annual report summarizing yearly monitoring of precipitation and hydrologic conditions is prepared and submitted.

Sincerely,

A handwritten signature in black ink, appearing to read "Linton F. Brooks, for". The signature is written in a cursive style with a large initial "L" and a trailing "for" at the end.

Linton F. Brooks  
Administrator