



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



**MAR 08 2012**

The Honorable Peter S. Winokur  
Chairman  
Defense Nuclear Facilities Safety Board  
625 Indiana Avenue, NW, Suite 700  
Washington, DC 20004

Dear Mr. Chairman:

On December 13, 2011, the Defense Nuclear Facilities Safety Board (DNFSB) issued a letter requesting a report and briefing describing specific actions the National Nuclear Security Administration (NNSA) has taken or plans to take to ensure that two specific safety systems at the Plutonium Facility at Lawrence Livermore National Laboratory (LLNL) can perform their safety functions. The letter included DNFSB concerns over legacy confinement boundaries of the Glovebox System and the potential defeat of the Fire Detection and Alarm System (FDAS) by a non-safety system, concluding that those safety systems could not be relied upon to fulfill their safety functions. This letter transmits reports from the Livermore Site Office (LSO) and from LLNL addressing the concerns raised by DNFSB.

The elements identified by the DNFSB as deficient confinement boundaries of the Glovebox System are portions of legacy systems. LSO concluded that the Glovebox System, including legacy portions of the system, continues to meet the required safety functions as described in the Plutonium Facility Documented Safety Analysis. LSO will oversee LLNL's plans and options for upgrading glovebox confinement elements.

The FDAS for the Plutonium Facility interfaces with the site-wide evacuation voice/alarm system, which is not a credited safety system; the latter system is configured as having priority. LLNL will modify the FDAS to ensure the site-wide evacuation system cannot override the facility fire alarm announcement; this is projected for completion by June 2012. LSO determined that this current vulnerability of the FDAS could result in delayed notification of workers in the Plutonium Facility Radioactive Materials Area. However, remote monitoring is unaffected so the present system continues to meet the required safety functions as described in the Plutonium Facility Documented Safety Analysis.



NNSA will provide a report to the Board in December 2012 describing actions LSO and LLNL took to resolve the issues and will address concerns from Appendix A of the DNFSB letter.

If you have any questions concerning this letter, please contact me or have your staff contact Ms. Sharon Steele at (202) 586-9554.

Sincerely,

A handwritten signature in black ink, appearing to read "Don Cook", with a long horizontal flourish extending to the right.

DONALD L. COOK  
Deputy Administrator  
for Defense Programs

Enclosure

cc w/enclosure:  
T. D'Agostino, NA-1  
M. Champagnone, HS-1.1  
K. Davis, LSO