



**Department of Energy**  
Washington, DC 20585

October 9, 2001

Dr. John Browne  
[ ]  
Los Alamos National Laboratory  
P.O. Box 1663  
Los Alamos, NM 87545

Subject: Enforcement Letter

Dear Dr. Browne:

This letter refers to the Department of Energy's (DOE) evaluation of Los Alamos National Laboratory's (LANL) report of noncompliances with quality assurance provisions of DOE's nuclear safety requirements occurring at Los Alamos Critical Experiments Facility (LACEF) TA-18. These issues involved violations of the established LACEF Technical Safety Requirements (TSR) and were reported into the Noncompliance Tracking System (NTS) by your staff (NTS-ALO-LA-LANL-TA18-2000-0001) on February 25, 2000. These noncompliances were a part of the enforcement action issued by DOE to LANL in December 2000 (EA 2000-13).

Commitments in this NTS report include corrective action number 7 that stated "All LACEF operations personnel will complete in-depth training on the TSR for each [ ] assembly at TA-18. The training will include an analysis of design features, limiting conditions for operation, surveillance requirements, and administrative controls specific to each assembly." This corrective action was reported to DOE as complete on November 1, 2000. In addition, corrective action number 9 committed LANL to completing an "evaluation of the design configuration requirements for the LACEF authorization basis." The corrective action further stated that "through the evaluation, NIS determined the AB requirements for each assembly, walked down the assembly systems to verify the requirements were being implemented, and developed a list of deficiencies." LANL reported this corrective action as being completed on July 24, 2000.

On January 30, 2001, LACEF staff failed to comply with a TSR (Section 4.1.3.1) to set and document each scram setting before operation of the Godiva IV [ ] Assembly at a neutron multiplication factor above [specified number]. This TSR violation was discovered on March 20, 2001, during a biannual review of the operating procedures and logs. Documentation of the scram settings had not been performed in both the operating procedures checklist or in the log as required. The LACEF staff, who had operated the Godiva IV on January 30, said they were sure they correctly set the log-N instruments but forgot to document this action.

On February 28, 2001, LACEF staff failed to comply with another TSR on the Planet [ ] Assembly. This TSR (Section 4.1.3.2) requires two startup channels be tested daily and the results documented prior to operation above a multiplication factor of [specified number]. A biannual review of the operation procedures and logs, conducted on March 21, 2001, discovered the testing of Planet [ ] Assemble startup channels had not been documented in the Operating Procedure Checklist or in the log as required.

On July 25, 2001, the LACEF Team Leader determined that a TSR surveillance violation for the COMET [ ] Assembly had occurred. The surveillance requirement involved a calculation to ensure that the TSR limit for the total planned [activities] in a sample would be less than [specified number]. LANL personnel determined that this calculation had not been performed nor documented prior to performing experiments that morning. Additionally, this TSR had been in place since September 1995 and LANL personnel concluded that the TSR surveillance had not been performed since the effective date in 1995.

On August 9, 2001, the LANL PAAA coordinator contacted the Office of Enforcement and Investigation (OE) to notify OE that the corrective action number 9 in the NTS had not been completed as reported. As part of the original corrective action in 2000, LANL personnel had reviewed the LACEF authorization basis requirements but had focused on the limiting conditions of operation and not the TSR surveillance requirements.

Continued violations within a few months of completing comprehensive training, indicate that the quality controls necessary to ensure compliance are not adequate. In addition, the failure to recognize and comply with a TSR after reporting the completion of a comprehensive review to ensure Authorization Basis requirements were identified and complied with, is additional evidence the corrective actions have not been effective.

OE considers that incorrectly reporting corrective actions as completed to be a very serious matter since we rely extensively on the accuracy of contractor's statements regarding implementation of corrective actions. However, OE acknowledges that LANL identified these deficiencies and upon learning of these deficiencies, LANL took the initiative to report these problems directly to OE. Further, LANL added a corrective action to the NTS report to perform a crosswalk of all TSR surveillance requirements with a target completion date of October 31, 2001. Although these actions are recognized as positive actions, continued violations of requirements established by your Authorization Basis that are necessary to ensure safe operations of the [ ] Assemblies could, if left uncorrected, lead to a more significant event.

DOE is not planning to take further enforcement action at this time but will continue to monitor implementation of your corrective actions for the subject NTS report. If your corrective actions in this area are not effective, DOE will consider additional actions.

Should you have any questions concerning this letter, please contact Susan Adamovitz of my staff at 301-903-0125.

Sincerely,



R. Keith Christopher  
Director  
Office of Price-Anderson Enforcement

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