



Department of Energy
National Nuclear Security Administration
Washington, DC 20585

December 17, 2002

OFFICE OF THE ADMINISTRATOR

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

EA-2002-05

Subject: Preliminary Notice of Violation and Proposed Civil Penalty \$220,000 (Waived by Statute)

Dear Dr. Browne:

This letter refers to the recent investigation by the Department of Energy (DOE)/ National Nuclear Security Administration (NNSA) of the unauthorized staging and storage of transuranic (TRU) waste in PF-185 from March 1996 until June 2001.

Following consultation with my office, the Department's Office of Price-Anderson Enforcement (OE) initiated an investigation in March 2002. The scope of the investigation included: (1) failures leading to the establishment of an unauthorized nuclear facility by storage of TRU waste in PF-185 without a safety evaluation and associated controls; (2) failures in 1999 and 2000 to implement site work control requirements for identifying and categorizing nuclear facilities and associated hazards; (3) failures to identify these deficiencies with the nuclear storage conditions in PF-185 over a five-year period; and (4) deficiencies in the Los Alamos National Laboratory (LANL) event investigation, cause analysis, and corrective action development and implementation once the problems came to light.

An Investigation Summary Report describing the results of that review was issued to you on July 15, 2002. An Enforcement Conference was held on August 27, 2002, in Germantown, Maryland, with members of your staff to discuss these findings. A Conference Summary Report is enclosed.

Based on our evaluation of these events and information presented by the Laboratory during the Enforcement Conference, the DOE/NNSA has concluded that violations of the Price-Anderson Amendments Act (PAAA) Quality Assurance Rule (10 CFR 830.122) have occurred. The violations are described in the enclosed Preliminary Notice of Violation (PNOV).

I am personally concerned about the seriousness of the circumstances surrounding this matter, including the safety significance of operating a facility for over five years with an inventory of nuclear material but without an analysis to determine the appropriate safety management controls



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for protection of the workers and public. Although there were no immediate radiological consequences, it is fortuitous that no unanticipated events occurred that would have caused unanalyzed and significant exposures to workers and the public.

The NNSA recognizes that this situation went undiscovered by LANL from March 1996 to June 2001. However, consistent with our commitment to focus on relevant problem solving, a decision has been made not to pursue those initial violations of PAAA work control requirements that occurred in 1996 when the TRU waste was first moved into PF-185. The LANL had just begun implementing the requirements of the rule in 1996 and LANL's associated nuclear safety work processes were not as fully developed when compared to more recent time frames (1999 to present). The DOE/NNSA has alternatively chosen to focus on the violations involving the implementation adequacy of these more current safety requirements, and the quality improvement elements of problem identification, cause analysis, and corrective actions. The specific violations set forth in the PNOV are summarized as follows:

Section I of the PNOV includes violations of operating a nuclear facility between 1999 and 2001 without an approved Documented Safety Analysis (DSA) or Technical Safety Requirements (TSRs). Section II includes various work control violations that occurred between 1999 and 2001. Laboratory procedures issued at that time clearly required management to categorize nuclear facilities, including (1) defining facility boundaries, (2) identifying activities, (3) identifying hazards, and (4) determining facility categorization. Procedures also required a hazard evaluation, an accident analysis and development of nuclear safety controls. None of these requirements were implemented.

Section III violations include quality improvement failures to detect the safety deficiencies for a period of several years. For over five years, management processes including oversight and assessment activities failed to identify that approximately 200 containers constituted an inventory of nuclear material, which required analyses and controls. Section IV violations include failures to fully evaluate and determine the causes of the various problems involved in these events subsequent to their identification in June of 2001. In particular, LANL failed to aggressively and timely investigate the extent of the problem and determine the deficiencies in safety management controls (and their causes) that allowed this condition to exist for five years before discovery.

In the ordinary course, DOE would have issued a Proposed Imposition of Civil Penalty in the amount of \$220,000 in this case. With respect to LANL, however, this civil penalty is currently waived by statute. The specific detail in support of the penalty is provided in the PNOV. It should be noted that no mitigation was provided since there was an extraordinary lack of timely identification of the condition by LANL, and LANL did not aggressively investigate the extent of the problems and their causes until subjected to the PAAA enforcement process.

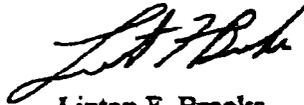
During the Enforcement Conference held in August of 2002, LANL discussed ongoing changes in the management of the laboratory but provided only limited information on actions directed squarely at correcting the causes of some of the violations. Consequently, LANL still needs to address the institutional expectations on: (1) processes to assure operations are in conformance with approved authorization bases, including management oversight actions and self-assessment

activities; (2) facility managers' use of all authorization basis material as a tool in managing their facilities beyond reliance on TSRs; and (3) the need to enhance the focus of cause analysis and corrective action processes. To date, effective corrective actions have not been developed to address all of these areas. It should also be noted that other safety basis and root cause problems at LANL are under separate investigation by OE and that those matters will continue to be investigated.

The failure of senior laboratory management to promptly identify the condition, and upon identification, to comprehensively and aggressively investigate the extent of the problems and their causes, calls into question the commitment of the laboratory to fulfill its contractually obligated nuclear safety responsibilities. It is expected that appropriate change will occur at the laboratory in response to these matters, and we will work with you to achieve that end.

You are required to respond to this letter and to follow the instructions specified in the enclosed PNOV when preparing your response. Your response should document any additional specific actions taken to date to address the three institutional issues discussed above. Corrective actions will be tracked in the noncompliance tracking system (NTS). You should enter into the NTS (1) any additional actions you plan to prevent recurrence and (2) the anticipated completion dates of such actions. After reviewing your response to the PNOV, including your proposed corrective actions entered into NTS, DOE/NNSA will determine whether further enforcement action is necessary to ensure compliance with DOE nuclear safety requirements.

Sincerely,



Linton F. Brooks
Acting Administrator

**CERTIFIED MAIL
RETURN RECEIPT REQUESTED**

Enclosures:
Preliminary Notice of Violation
Enforcement Conference Summary
List of Attendees