



DEPARTMENT OF ENERGY  
National Nuclear Security Administration  
Los Alamos Site Office  
Los Alamos, New Mexico 87544  
**FEB 23 2009**



Mr. Michael Anastasio  
Director  
Los Alamos National Security, LLC  
PO Box 1663, MS-A100  
Los Alamos, NM 87544-1234

Mr. Rueben M. Rafferty  
Prime Contract Office  
Los Alamos National Security, LLC  
PO Box 1663, MS-722  
Los Alamos, NM 87544-1234

Dear Messrs:

References:

- 1) Contract Number DE-AC52-06NA25396, Los Alamos National Security, LLC (LANS) and the Department of Energy, National Nuclear Security Administration;
- 2) Section H, *Special Contract Requirements*;
- 3) Clause H-2, *Performance Direction*.

Subject: Nuclear Material Control and Accountability (MC&A) Program Concerns

On January 27, 2009, consistent with Energy Department policy, Los Alamos National Security, LLC (LANS) reported an Incident of Security Concern (IMI-2.5) involving an inventory difference (ID) that exceeded alarm limits with no suspicion of theft or diversion. Subsequently, LANS requested that the category of the incident be reduced to an IMI-3 level. Based on being challenged by the National Nuclear Security Administration's (NNSA's) Los Alamos Site Office (LASO) and Office of Defense Nuclear Security (NA-70), the LANS request to downgrade the incident was rescinded raising concerns with the Laboratory's ability to properly diagnose and resolve the situation in a timely manner. It is also noted that this issue arose on the heels of assessments over the past year by the Office of Independent Oversight and NA-70 indicating weaknesses within the Nuclear Material Control & Accountability (MC&A) program that required management attention to make needed improvements.

Acting upon the concern, NA-70 chartered a Special Review Team to assess the ID issue during the week of February 8, 2009. The goal of this review was to provide assurance to NNSA Senior Management that LANS was appropriately responding to the event in a manner that would resolve the issue and allow the facility to resume safe and secure operations.

Upon analysis of the ID calculation and evaluation, the Special Review Team concluded that the facility's reported ID was inaccurate; the established control limit was not based upon a statistical evaluation of measurement uncertainty and active inventory as required; and key personnel in

OFFICIAL USE ONLY  
May be exempt from public release under Freedom of Information Act (5 U.S.C. 552), exemption number and category 2,  
Circumvention of Statute.  
Department of Energy review required before public release.  
Name: Amy Whitworth, NA-70  
Date: February 20, 2009 Guidance (if applicable): None

critical positions lacked a basic understanding of fundamental MC&A concepts necessary to recognize and resolve the issue. Further, the Team determined that the facility physical inventory program – as currently structured – does not result in the facility's ability to conclusively determine control of special nuclear material as there is no reconciliation of the physical inventory that includes calculation and evaluation of the ID.

This issue, along with issues identified during assessments over the last year, raises questions about the ability of the Los Alamos National Laboratory (LANL) MC&A Program to accomplish its primary objective, namely to deter and detect theft and diversion of special nuclear material. This larger issue was further reinforced by the Special Review Team during the on-site review through the identification of concerns such as the lack of qualified and experienced personnel in critical positions; inattention to performance indicators; lack of an approved and compliant MC&A Plan; lack of procedures for key processes; conduct of operations deficiencies; and inadequate quality assurance practices. In the context of the overall LANL security program, these concerns are partially mitigated by the security envelope which has strong and effective physical security and protective forces as validated by the recent Independent Oversight inspection. Otherwise, these identified weaknesses in the MC&A Program would impact the ability of the facility to continue operations.

The lack of qualified and experienced personnel in critical positions and documented procedures contributed significantly to the current ID issue and were previously identified to LANS in June 2008 by the NA-70 on-site review. While LANS took action to address many of the concerns identified in June, it is disappointing that LANS management took little action to address these larger concerns regarding critical positions and procedures since that time and that repeated attempts to provide the necessary expertise from the BWXT corporate structure to assist in addressing these issues were largely ignored.

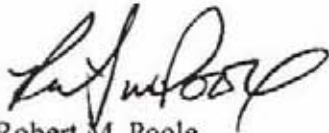
I recognize that LANS has taken significant and swift action to address the immediate ID issue in response to the Special Review Team preliminary recommendations, and that this action involves bringing in expertise from the BWXT corporate structure. Further, this action has been coordinated with my office as well as with NA-70. These recent actions are positive and demonstrate LANS's understanding and acceptance of the severity of the MC&A Program issues identified and a strong desire to fix them.

However, in recognition of the state of the current MC&A Program and possible significant implications and in accordance with clause H-2 entitled performance direction, I am directing you to continue to aggressively work to resolve the immediate ID issue in accordance with the preliminary recommendations of the Special Review Team and formally report progress to my office and NA-70 on a weekly basis until this issue is resolved and validated. I am also directing LANS to work closely with my staff and NA-70 to develop and execute an aggressive program to address and correct the deficiencies/weaknesses identified by the Special Review Team in their report as well as MC&A issues identified during previous inspection/reviews that remain open. I can not overemphasize the importance of resolving these MC&A issues in a timely manner in order to regain confidence in our essential checks and balances for protecting special nuclear material.

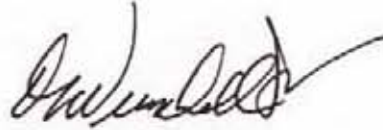
**OFFICIAL USE ONLY**

Please submit evidence packages to this office demonstrating the completion of this direction. Additionally, I have requested that the Special Review Team conduct another review of the LANL MC&A program in May to assess progress in addressing program deficiencies.

Please do not hesitate to contact me at (505) 667-5105 or Russell Kirkpatrick, Assistant Manager for Safeguards and Security at (505) 665-4940 regarding this issue.



Robert M. Poole  
Contracting Officer



Donald L. Winchell, Jr.  
Manager

OOM: 4RS-024

cc:

R.Kirkpatrick, SM, LASO  
R. Snyder. OOM, LASO  
R. Poole, BA, LASO  
Records Center, LASO  
Official Contract File, LASO

OFFICIAL USE ONLY