

# memorandum

DATE: July 28, 2010

REPLY TO  
ATTN OF: IG-40

SUBJECT: Letter Report on “Allegations Involving the National Nuclear Security Administration’s National Security Vaults,” (INS-L-10-02, S09IS020)

TO: Principal Assistant Deputy Administrator for Military Applications, NA-10

The Office of Inspector General (OIG) received a complaint alleging that improvements and clarifications were needed in both the Department of Energy (Department) and National Nuclear Security Administration (NNSA) site-specific policies and procedures regarding visitor access to nuclear weapons data and displays within certain NNSA national security vaults. The complaint also included an allegation regarding the need to improve the accountability of nuclear weapon models displayed within the national security vaults. This Letter Report provides the results of our inspection concerning these issues.

## BACKGROUND

One of the primary missions of the NNSA is to ensure the safety and reliability of the Nation’s nuclear arsenal. NNSA nuclear weapons activities are carried out in a nationwide complex of Government-owned, contractor-operated sites that include three national laboratories, a test site, and nuclear weapons production sites. These facilities provide the necessary research, development and production capabilities to maintain the reliability, security and safety of nuclear weapons.

Within the nuclear weapons complex, there are a small number of vault rooms that are designated as “national security vaults.” These vaults contain a specialized collection of classified nuclear weapons designs and data in the form of models, diagrams and video displays. Similar to other classified vault rooms, national security vaults are defined areas that are protected to prevent unauthorized access. The Department’s Classified Matter Protection and Control policies along with DOE Order 5610.2 (Order), “Control of Weapon Data Access,” provide requirements for the handling, protection and control of nuclear weapons data within these vaults. According to Department policies, access to nuclear weapons data within a vault must be controlled by a vault custodian and access is granted based on a predetermined “need-to-know” in the performance of an individual’s official duties.

## RESULTS OF INSPECTION

The allegation concerning a need for improvements in the accountability of nuclear weapons displays could not be substantiated. We did not find any indication that the displays were

lost or unaccounted for. During our review, we learned that periodically the displays may be temporarily removed from national security vaults to other secure areas for briefings or for educational purposes and then returned to the national security vaults. At one location, we found past evidence that applicable Departmental policy regarding custodial control of displays was not always being followed during these temporary moves. However, procedural changes strengthening the chain of custody of the displays were implemented to ensure compliance with Departmental policy prior to our inspection. We evaluated these procedural changes and found them to be reasonable.

We did, however, substantiate the allegation that improvements and clarifications were needed in both the Department's and NNSA's site-specific policies and procedures regarding visitor access to nuclear weapons data and displays within certain NNSA national security vaults. Specifically, DOE Order 5610.2, issued in 1980, does not address changes in the nuclear weapons complex that have taken place over the last 30 years; thus, in our judgment, the Order should be updated. Also, subject to appropriate review by the Department of any potential security implications, there may be an opportunity to simplify the NNSA Headquarters and the NNSA local site approval processes for access to nuclear weapons data within national security vaults. These processes currently include steps that go beyond those found in the approval process for access to nuclear weapons data in other locations within the nuclear weapons complex and there is a question if these added steps bring value to the process. Finally, site-specific procedures concerning access could be improved to strengthen management internal controls and help ensure only those who have a need-to-know are allowed access to nuclear weapons data in the national security vaults.

#### *Revision of Policy—DOE Order 5610.2*

We found that DOE Order 5610.2, "Control of Weapon Data Access," should be revised to address the many changes in the nuclear weapons complex that have occurred since the Order was issued in 1980. This Order defines the "nuclear weapons complex" as it existed in 1980, and it establishes authorities, responsibilities and procedures for the access and control of nuclear weapons data. The Order was developed and published prior to the existence of NNSA and at a time when the United States was still testing nuclear weapons. As a result, it does not reflect the many significant organizational and operational changes that have occurred throughout the nuclear weapons complex during the last 30 years.

Specifically, various organizations are named in the Order as being part of the nuclear weapons complex; however, some organizations no longer exist while others are now managed by NNSA, and some new organizations have been created. As a prime example, the NNSA Service Center did not exist when DOE Order 5610.2 was written; consequently, its very important roles, responsibilities and authorities are not mentioned in the Order even though it is central to the structure and operation of NNSA. For example, the NNSA Service Center is now responsible for granting security clearances to individuals within the NNSA nuclear weapons complex who require access to classified information, including nuclear weapons data. Also, the Order names certain Department positions, such as the Manager of the Oak Ridge Operations Office, as having authority to grant access to nuclear weapons data; however, due to organizational changes over the last 30 years, the Manager of the

Oak Ridge Operations Office is a Department employee who does not have authority under existing NNSA policy to grant access to nuclear weapons data within the NNSA nuclear weapons complex. While changes to the organizational structure of the nuclear weapons complex have prompted the need for modifications of procedures, responsibilities and authorities with regard to controlling and granting access to nuclear weapons data within the nuclear weapons complex, such modifications have not been reflected in the Order.

From an operations perspective, there have been technological advances within NNSA's nuclear weapons program, such as the increased use of computer systems to store, access and transmit nuclear weapons data; the use of supercomputers for advanced modeling instead of real-time testing; and, the development of new facilities, such as the National Ignition Facility. These advancements have not been addressed in the current Order with regard to controlling access to nuclear weapons data.

#### *Simplifying Procedures for Approving Access to Nuclear Weapons Data in the National Security Vaults*

Our review determined that, subject to appropriate review by the Department of any potential security implications, there may be an opportunity to simplify the NNSA Headquarters and the NNSA local site approval processes for access to nuclear weapons data within national security vaults. These processes currently include steps that go beyond those found in the approval process for access to nuclear weapons data in other locations within the nuclear weapons complex and there is a question if these added steps bring value to the process.

Specifically, at both the NNSA Headquarters level and at the local NNSA site level, the process for access to nuclear weapons data in national security vaults includes steps that are not required for the simpler and less complex process to access the majority of nuclear weapons data in other classified storage vaults, computer systems and storage media located throughout the nuclear weapons complex. For example, access to nuclear weapons data by any individual who has not been issued a "Q" clearance within the nuclear weapons complex requires NNSA Headquarters review and approval, to include individuals outside the nuclear weapons complex and individuals from other Federal agencies such as the military. NNSA Site Office officials and designated facility contractor officials are authorized to grant access to nuclear weapons data without the need for NNSA Headquarters review or approval if the individual has been issued a "Q" clearance within the nuclear weapons complex. However, if an individual requesting access to nuclear weapons data at a given site also requires access to the national security vault, an added request and approval is needed.

NNSA Headquarters officials said that even though DOE Order 5610.2 does not specifically mention national security vaults or any special access requirements for the vaults, NNSA Headquarters currently requires a specific access request to visit national security vaults by non-weapons complex individuals in addition to a request to access all other nuclear weapons data at a given location. We were told that this process has been an on-going procedure for

many years, but the exact reason for the special request and approval for national security vault visits was not known. We were unable to locate any specific documentation that explained the rationale for requiring a specific request to access nuclear weapons data in national security vaults.

During discussions with senior officials, they agreed that a single approval process for access to all nuclear weapons data at a given location would streamline the process without adversely affecting security. We were told that nuclear weapons data in national security vaults was no more sensitive than nuclear weapons data at the many other locations in the nuclear weapons complex. For example, officials at one facility told us that the nuclear weapons data in the national security vault was less sensitive than the critical nuclear weapons design information stored at other secure locations at the site.

In addition, NNSA Site Offices and NNSA laboratory contractors have local memoranda of understanding that establish approval processes which also differentiate between requests for access to nuclear weapons data inside national security vaults and requests for access to nuclear weapons data outside national security vaults. For example, at one nuclear weapons facility, local facility contractor officials had authority to grant all nuclear weapons complex individuals access to nuclear weapons data at the facility except for nuclear weapons data inside the national security vault. Access to nuclear weapons data inside the national security vault required NNSA Site Office approval. The facility was only given the authority to grant their own employees access to the national security vault even though the facility had the authority and ability to verify security clearance and access level information for anyone within the nuclear weapons complex.

Officials responsible for weapons program activities and vault administration gave examples of important visitors being denied access to national security vaults for unknown administrative reasons associated with the specific access request requirement. The visitors were denied access even though they had already been approved for and had access to other nuclear weapons data during the visit that was more sensitive than the data in the national security vaults. In addition, officials at the sites we visited told us the individual site access approval processes were not always consistent throughout the complex and this has caused delays and confusion concerning national security vault visits. Also, officials within the NNSA nuclear weapons complex that we interviewed expressed the opinion that the responsible NNSA facility contractor, in most cases, was better positioned to review requests and grant access to nuclear weapons data, including access to national security vaults, without the added steps of Site Office approval. It should be noted that facility contractors routinely perform these types of functions on a day-to-day basis and the Site Offices would still maintain oversight responsibility for the access approval process.

#### *Controls Over Need-to-Know Access to Nuclear Weapons Data within the National Security Vaults*

We found that site-specific procedures concerning access could be improved to strengthen management internal controls and help ensure only those who have a need-to-know are allowed access to nuclear weapons data in the national security vaults.

Specifically, NNSA Headquarters officials told us that the local facilities that own and control the nuclear weapons data are primarily responsible for determining need-to-know. Nuclear weapons program custodians at the local facilities are assigned responsibilities for the control and accountability of the nuclear weapons models displayed within national security vaults. However, these custodians were not always involved in the vault access request approval process and were not always aware that visitors were allowed to view displays they were responsible for. At one site in particular, division managers who were not part of the nuclear weapons program, and who were not weapons designers, were approving visits to the national security vault without custodian knowledge or input. Officials we interviewed said that an impartial review by a custodian knowledgeable in nuclear weapons would add value to a need-to-know determination.

In addition, we identified three areas where opportunities exist to improve vault access controls. These areas include vault visits, access requests, and log books.

- Purpose of Vault Visits. National security vaults contain a variety of nuclear weapons display models, visual aids and other weapons-related information and materials. These vaults are often compartmentalized with the ability to shroud or conceal certain displays when a visitor, or group of visitors, may not need access to everything in the vault. However, in some cases we learned that individuals approved for access may have had visual access to areas in a vault that may not have been pertinent to the purpose of the visit, or to the level of the individual's need-to-know. In addition, in reviewing records of visit requests between May 2007 to August 2009 at one site, we observed that some records did not provide clear purpose statements pertinent in determining which weapons displays or materials needed to be concealed and which needed to be displayed. Without clear purpose statements, vault custodians are not in the best position to determine which displays need to be shrouded or concealed.
- Access Request Forms. NNSA facilities have written policies specifying that contractor management officials, such as division managers, could approve access requests to national security vaults for individuals within the nuclear weapons complex. However, our review of access request records revealed that a number of subordinates, including administrative assistants, were actually signing the authorization forms even though there was no policy in place to allow for this. Interviews with these administrative assistants revealed they were simply signing and submitting the request forms on behalf of managers with little knowledge of the purpose of the visit or the need-to-know requirements.
- Vault Room Entry Log Book. At one location, some signatures found in the vault room entry log book were illegible to the point where we could not immediately determine who had entered the vault. Further, employee identification numbers were not recorded in the book as required by the facility's vault room policy.

During our review, the facility vault custodian revised log book sign-in procedures to ensure the log book recorded both a legible visitor signature along with an employee identification number in accordance with their vault room policies.

Also, during our review, we determined that the vast majority of individuals visiting the national security vaults had official duties within the nuclear weapons program. However, we found that individuals whose official duties, in our judgment, were not directly related to the nuclear weapons program were periodically given tours of national security vaults or given briefings using classified nuclear weapons displays in the vaults. We provided the results of our review to officials within NNSA's Office of Defense Programs for appropriate action.

### SUGGESTED ACTIONS

To assist with opportunities for improving policies and procedures used for determining access to national security vaults, we suggest that the Principal Assistant Deputy Administrator for Military Applications:

1. Revise DOE Order 5610.2, "Control of Weapon Data Access," to address the changes in the nuclear weapons complex that have occurred since the Order was issued in 1980.
2. Subject to appropriate review by the Department of any potential security implications, assess the process for approving access to nuclear weapons data in national security vaults and take appropriate actions to simplify, add clarity and improve efficiencies of operations.
3. Evaluate the need to implement policies and procedures that include custodian assessments and clear purpose statements and authorized signatures on request forms, to help ensure that only those who have a need-to-know are allowed access to nuclear weapons data in the national security vaults.

Since we are not making any formal recommendations in this report, a formal response is not required.

We appreciate the cooperation we received from your staff during our inspection. If you have any questions concerning this inspection, please contact Mr. Richard W. Curran, Director, Western Region, at (505) 845-5153.



Sandra D. Bruce  
Assistant Inspector General  
for Inspections and Special Inquiries  
Office of Inspector General

Attachment

cc: Chief, Health, Safety and Security Officer, HS-1  
Director, Office of Internal Controls, NA-66  
Director, Office of Internal Review, CF-80  
Team Leader, Office of Risk Management, CF-80  
Audit Resolution Specialist, Office of Risk Management, CF-80

## SCOPE AND METHODOLOGY

This inspection was performed between July 2009 and March 2010 at selected locations within the National Nuclear Security Administration (NNSA) complex. Due to the subject matter addressed in this report, specific sites are not identified. To accomplish the objectives of the allegation-based inspection we:

- Reviewed and evaluated both Department of Energy and site-specific policies and procedures that provide requirements for access to nuclear weapons data;
- Toured and evaluated national security vaults at selected NNSA sites;
- Reviewed national security vault access logs and judgmentally selected and reviewed individual national security vault access records, including information in the Department's Weapons Data Access Control System; and,
- Interviewed key NNSA Headquarters, Site Office, and contractor officials regarding access to nuclear weapons data.

This inspection was conducted in accordance with the current Council of the Inspectors General on Integrity and Efficiency "Quality Standards for Inspections" issued by the President's Council on Integrity and Efficiency.