

memorandum

DATE: January 29, 2009

Audit Report Number: OAS-L-09-03

REPLY TO
ATTN OF: IG-32 (A08YT044)

SUBJECT: Audit Report on "Storage Capacity at the Pantex Plant"

TO: Director, Policy and Internal Controls Management, NA-66

INTRODUCTION AND OBJECTIVE

The National Nuclear Security Administration's (NNSA's) Pantex Plant (Pantex) is responsible for the assembly and dismantlement of nuclear weapon systems. Thus, Pantex has to store every weapon part at some point during these processes. These parts include items such as nuclear weapon pits, cases, and detonators. In the past, Pantex has had sufficient capacity to store all of these weapon parts. However, recent increases in dismantlement rates are expected to strain Pantex's storage capacity. NNSA's Pantex Site Office oversees the management and operating contract held by B&W Pantex, LLC to operate the facility.

The objective of this audit was to determine if the Pantex Plant has identified sufficient storage capacity to meet future mission requirements. We analyzed two categories of weapon parts – pits and other weapon components.

CONCLUSIONS AND OBSERVATIONS

Pantex's future capacity will not be adequate to store a small number of excess pits; however, it has identified numerous options to mitigate this shortage. Regarding other weapon components, Pantex could not demonstrate and we could not determine that it will have sufficient storage capacity to meet future mission requirements. Further, Pantex cannot demonstrate that plans to disposition obsolete and excess components will effectively mitigate potential weapon component space shortages. Although Pantex had estimated the volume of space that will be needed to store each weapon program's components from future dismantlements, it does not know the amount of storage volume currently available in each warehouse; the storage volume used by current inventory; or the amount of storage volume to be created by the disposition of obsolete and excess parts.

The Pantex Site Office had not ensured that the Pantex Plant had a robust, comprehensive inventory management system needed to forecast its future available storage capacity. Components stored at Pantex are tracked in its Computer Associates System (CAS). However, CAS does not include a field for volume measurement. Without this measurement, it is unlikely that Pantex will be able to determine the

amount of storage capacity required. In addition, CAS cannot produce an accurate aging report (date an item was last used in production) to identify obsolete and excess parts because it only tracks the last date that the item was touched, which may have been simply to move it from one location to another. We noted that Pantex planned to develop an updated CAS system; however, this action was delayed due to funding constraints.

In contrast, during our review, we learned that the Kansas City Plant (KCP) had instituted several best business practices in managing its material inventory. For example, KCP's inventory management system contains capacity data for each storage area. KCP also manages its inventory disposition efforts with the help of an aging report that tracks the last time an item was used. Further, KCP identifies the volume of warehouse space made available by disposing of or otherwise dispositioning components. We concluded that Pantex could benefit from implementing similar practices.

NNSA recognizes that Pantex's storage capacity is limited. To address this issue, NNSA had offered Pantex performance fee incentives to dispose of or otherwise disposition obsolete and excess parts to make available additional storage space. However, this effort to provide additional storage space may not be effective since the incentives are based on the quantity of items dispositioned rather than the volume of storage space made available by the dispositioned parts.

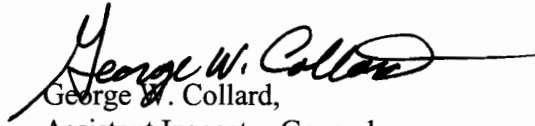
Unless Pantex improves its ability to forecast its storage capacity for weapon components it is at risk of not being able to meet future needs of the nuclear weapons complex. Given the increases in weapon dismantlement rates, effective management of storage capacity will be essential to prevent potential programmatic impacts on the nuclear weapons complex.

Accordingly, to facilitate accurate storage needs calculations and projections, we suggest that the Manager, Pantex Site Office, ensure that Pantex update the CAS system to:

- Include metrics for volume measurement for both storage areas and components;
- Produce an aging report that tracks when an item was last used; and,
- Provide data to measure the amount of storage space created by component disposition efforts.

In addition, we suggest the Manager, Pantex Site Office reevaluate component disposition performance based incentives.

Since no formal recommendations are being made, a formal response to this report is not required. We appreciated the cooperation of your staff throughout the audit.



George W. Collard,
Assistant Inspector General
for Performance Audits
Office of Inspector General

Attachment

cc: Director, Policy and Internal Controls Management, NA-66
Team Leader, Audit Liaison Team, CF 1.2
Manager, Pantex Site Office
Audit Liaison, Pantex Site Office

SCOPE AND METHODOLOGY

The audit was performed between July 2008 and January 2009. We conducted work at the National Nuclear Security Administration (NNSA) Headquarters in Washington, DC and the Pantex Plant (Pantex) in Amarillo, TX.

To accomplish the audit objective, we reviewed and evaluated documentation related to storage capacity at Pantex as well as interviewed NNSA Headquarters, Pantex Site Office, B&W Pantex, LLC and Honeywell Federal Manufacturing & Technologies, LLC personnel responsible for storage activities.

We conducted this performance audit in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. The audit included tests of internal controls and compliance with laws and regulations to the extent necessary to satisfy the audit objective. Because our review was limited, it would not necessarily have disclosed all internal control deficiencies that may have existed at the time of our audit. We also assessed performance measures in accordance with the *Government Performance and Results Act of 1993* relevant to storage capacity at the Pantex Plant. We found that Pantex had established measures specific to this area. We did not rely on computer-processed data to satisfy our audit objective.

Management waived an exit conference.