

# memorandum

DATE: July 9, 2004

Audit Report Number: OAS-L-04-17

REPLY TO  
ATTN OF: IG-35 (A04DC008)

SUBJECT: Audit Report on "The National Nuclear Security Administration's High Explosives Manufacturing and Weapons Assembly/Disassembly Readiness Campaign"

TO: Deputy Administrator for Defense Programs, National Nuclear Security Administration

## INTRODUCTION AND OBJECTIVE

The High Explosives Manufacturing and Weapons Assembly/Disassembly Readiness Campaign (Campaign) was established to assure that the Nuclear Weapons Complex is fully ready to support mission and workload requirements associated with the production of high explosive components, requalification of weapon components for reuse, and the assembly and disassembly of war reserve nuclear weapons. The goal of the Campaign is to achieve production readiness by: (1) enhancing existing capabilities; (2) deploying new capabilities; (3) modernizing processes and facilities to establish the required capacity; and (4) using science based design, engineering, and manufacturing capabilities to achieve better integration across the complex, higher efficiency, impeccable quality and reduced cost.

As a means to achieve Campaign goals, each fiscal year (FY), the National Nuclear Security Administration (NNSA) establishes a series of high and low level milestones/deliverables for each of the three major technical efforts that make up the Campaign: High Explosives Manufacturing; Product Requalification; and Science-Based Manufacturing. This work is carried out primarily at the Pantex Plant, located near Amarillo, Texas.

The objective of this audit was to determine whether NNSA has met its goals and objectives related to the Campaign.

## CONCLUSIONS AND OBSERVATIONS

In FY 2004, the Campaign will miss a number of lower level milestones. Specifically, we found that due primarily to funding constraints, Pantex will not complete 11 of 24 lower level milestones scheduled for FY 2004. Delays in completing these milestones ranged from 6 to 12 months and involve all three major technical efforts: High Explosives Manufacturing; Product Requalification; and Science-Based Manufacturing. In addition, a prior lower level milestone that had been upgraded to a higher level milestone has been delayed for 18 months. These milestones are critical to the capabilities needed to identify and assess weapon components during the lifetime extension.

These delays occurred due primarily to budget reductions and inadequate safety authorization basis documents. NNSA requested \$29 million to complete the FY 2004 scheduled milestones; however, Congress cut funding for the Campaign to \$23.6 million. Subsequently, the Campaign experienced an additional reduction when \$3.9 million was reprogrammed to support the Design Basis Threat Initiative. Consequently, the FY 2004 Campaign's budget was reduced to \$19 million, which caused 11 milestones to be delayed. The remaining milestone, to deploy an Integrated Pit Inspection Station in Building 12-116 by September 2004, was delayed because NNSA has not completed a safety authorization basis document to ensure the safety of the operation.

Inadequate safety authorization basis documentation has been reported on in a number of prior Office of Inspector General (OIG) reports. For example, in our report on *National Nuclear Security Administration's Nuclear Explosive Safety Study Program*, DOE/IG-581, January 2003, we found that, in a large number of cases, safety authorization basis documents either had not been completed or did not meet current requirements, and as a result, delayed the completion of nuclear explosive safety studies. The OIG recommended a number of actions to address this matter, including requiring rigorous measures and evaluations of national laboratory and management and operating contractor performance in meeting safety requirements.

To its credit, NNSA and Pantex have reassessed Campaign requirements and rescheduled the missed milestones. With regard to authorization basis documentation, both NNSA and Pantex are currently implementing recommendations from prior OIG reports, which should aid in correcting this problem. Finally, NNSA officials advised that in the near future, a risk assessment will be conducted to measure progress and the effects of missed milestones. To further assist in achieving the goals and objectives of the Campaign, we suggest that NNSA:

- Conduct a comprehensive review of the Campaign to assess the effects and risk of delayed FY04 milestones;
- Prepare a recovery plan which addresses how future milestones will be completed, as well as how the program will progress if additional funding shortfalls occur; and,
- Continue to be vigilant in implementing all prior recommendations that impact the Campaign, in particular those related to authorization basis documents.

#### SCOPE AND METHODOLOGY

The audit was performed from March 1, 2004 to June 15, 2004, at NNSA Headquarters, Washington, DC; and the Pantex Plant, located near Amarillo, Texas. The scope of the audit was limited to determining whether the Campaign was meeting its goals and objectives related to high explosive manufacturing.

To accomplish the audit objective, we:

- Reviewed Federal requirements related to the Campaign;
- Examined budgetary information associated with performing assigned tasks for the Campaign;
- Reviewed work authorizations to determine contractor assignments;
- Discussed the Campaign with key Headquarters and Pantex officials;
- Reviewed performance measures established in accordance with the Government Performance and Results Act; and,
- Determined whether the Campaign met scheduled milestones.

The audit was performed in accordance with generally accepted Government auditing standards for performance audits and included tests of internal controls and compliance with laws and regulations to the extent necessary to satisfy the audit objective.

Accordingly, we assessed the significant internal controls related to the Campaign. Because our review was limited, it would not necessarily have identified all internal control deficiencies that may have existed. Additionally, we did not rely extensively on computer-processed data. In addition, we reviewed the implementation of Government Performance and Results Act of 1993, as related to the Campaign.

Since no recommendations are being made in this Letter Report, a formal response is not required. We appreciate the cooperation of your staff during the audit.



Lawrence R. Ackerly, Division Director  
National Nuclear Security Administration  
Audits Division  
Office of the Inspector General

cc: Director, Policy and Internal Controls Management, NA-66  
Team Leader, Audit Liaison Team, ME-100

# memorandum

DATE: July 9, 2004

REPLY TO  
ATTN OF: IG-35 (A04DC008)

SUBJECT: Final Report Package for "The National Nuclear Security Administration's High Explosives Manufacturing and Weapons Assembly/Disassembly Readiness Campaign"

TO: Director for Performance Audits and Administration

Attached is the required final report package on the subject audit. The pertinent details are:

1. Actual Staff days: 63

Actual Elapsed days: 130

2. Names of OIG and/or contractor audit staff:


Assistant Director: David Sedillo

Team Leader: Lynda Crowder

Auditor-In-Charge: John Wall

Audit Staff: Tychelle Young

3. Coordination with Investigations and Inspections: Investigations: Reggie France and Inspections: Geoffrey Gray.

  
Lawrence Ackerly, Division Director  
Office of Audit Services  
Office of Inspector General

Attachments:

1. Final Report (2)
2. Monetary Impact Report
3. Audit Project Summary Report
4. Audit Database Information Sheet

**MONETARY IMPACT OF REPORT NO.: OAS-L-04-17**

1. Title of Audit: The National Nuclear Security Administration's High Explosives Manufacturing and Weapons Assembly/Disassembly Readiness Campaign

2. Division: NNSA Audits Division/Washington Audit Group

3. Project No.: A04DC008

4. Type of Audit:

Financial: \_\_\_\_\_ Performance: X  
 Financial Statement \_\_\_\_\_ Economy and Efficiency \_\_\_\_\_  
 Financial Related \_\_\_\_\_ Program Results \_\_\_\_\_  
 Other (specify type): \_\_\_\_\_

5.

FINDING		BETTER USED		QUESTIONED COSTS			MGT. POSITION	POTENTIAL BUDGET IMPACT
(A)	(B) Title	(C) One Time	(D) Recurring Amount Per Year	(E) Questioned Portion	(F) Unsupported Portion	(G) Total	(H) C=Concur N=Noncon U=Undec	(I) Y=Yes N=No
	Audit of NNSA's High Explosives Manufacturing Weapons Assembly/Disassembly Readiness Campaign					N/A		No
TOTALS--ALL FINDINGS								

6. Remarks: None

7. Contractor: None

8. Contract No.: None

9. Task Order No.: None

10. Approvals:

Division Director & Date [Signature] 7/12/04  
 Technical Advisor & Date [Signature]

**Office of the Inspector General (OIG)**  
**Audit Project Office Summary (APS)**

Report run on: July 8, 2004 1:55 PM

Audit#: A04DC008    Ofc: CFA    Title: HIGH EXPLOSIVE MANUFACTURING

**\*\*\*\* Milestones \*\*\*\***

	<u>Planned</u>	<u>End of Survey</u>	<u>Revised</u>	<u>Actual</u>
Entrance Conference:.....	01-OCT-03		01-MAR-04	01-MAR-04
Survey:.....			15-JUN-04	15-JUN-04
Draft Report:.....				
Completed (With Report):..	30-SEP-04			( )
-----Elapsed Days:	365			130

**Elap. Less Susp:**

Date Suspended:	Date Terminated:
Date Reactivated:	Date Cancelled:
DaysSuspended (Cur/Tot): ( )	Report Number:
Rpt Title:	Report Type: Not Found

**\*\*\*\* Audit Codes and Personnel \*\*\*\***

Class: PER PERFORMANCE	AD: 152	SEDILLO
Program: DP2 Not Found	AIC: 236	WALL
MgtChall: 005 NATIONAL SECURITY (F)	Team Ldr: 84	CROWDER
Site: MSA MULTI-SITE AUDIT	Tech Adv: 432	GAMAGE
SecMiss: NNS NATIONAL NUCLEAR SEC		
PresInit: Not Found		

**\*\*\*\* Task Information \*\*\*\***

Task No:	CO Tech. Rep: , .
Task Order Dt:	Orig Auth Costs:
Orig Auth Hrs:	Current Auth Cost:
Current Auth:	Tot Actl Cost:
Tot Actl IPR Hr:	

**\*\*\*\* Time Charges \*\*\*\***

<u>Emp/Cont Name</u>	<u>Numdays</u>	<u>Last Date</u>
CROWDER, L	4.3	26-JUN-04
YOUNG, T	19.3	15-MAY-04
WALL, J	40.3	26-JUN-04
<b>Total:</b>		63.9

**\*\*\*\* Keywords \*\*\*\***

## AUDIT DATABASE INFORMATION SHEET

1. Project No.: A04DC008
2. Title of Audit: The National Nuclear Security Administration's High Explosives Manufacturing and Weapons Assembly/Disassembly Readiness Campaign
3. Report No./Date: OAS-L-04-17/July 9, 2004
4. Management Challenge Area: Stockpile Stewardship
5. Presidential Mgmt Initiative: N/A
6. Secretary Priority/Initiative: N/A
7. Program Code: DP1
8. Location/Sites: Pantex Plant
9. Finding Summary:

In FY 2004, the High Explosives Campaign will miss a number of lower level milestones. Specifically, we found that due primarily to funding constraints, Pantex will not complete 11 of 24 lower level milestones scheduled for FY 2004. Delays in completing these milestones ranged from 6 to 12 months and involve all three major technical efforts: High Explosives Manufacturing; Product Requalification; and Science-Based Manufacturing. In addition, a prior lower level milestone that had been upgraded to a higher level milestone has been delayed for 18 months. These milestones are critical to the capabilities needed to identify and assess weapon components during the lifetime extension.

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10. Keywords:

- Product Requalification
- High Explosives Manufacturing
- Project Planning
- Pantex Plant