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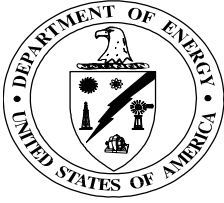
AUDIT  
REPORT

STOCKED INVENTORY AT THE  
SAVANNAH RIVER SITE



JUNE 2001

U.S. DEPARTMENT OF ENERGY  
OFFICE OF INSPECTOR GENERAL  
OFFICE OF AUDIT SERVICES



U. S. DEPARTMENT OF ENERGY  
Washington, DC 20585

July 27, 2001

MEMORANDUM FOR THE SECRETARY

FROM: Gregory H. Friedman (Signed)  
Inspector General

SUBJECT: INFORMATION: Audit Report on "Stocked Inventory at the Savannah River Site"

BACKGROUND

The Department of Energy's (Department) management and operating contractor at the Savannah River Site, Westinghouse Savannah River Company (Westinghouse), is responsible for managing the majority of the Department's missions and associated stocked inventory at the site. As of March 2001, Westinghouse maintained about 4.1 million items in its stocked inventory. These items have an acquisition value of about \$64 million. Westinghouse estimated the cost directly related to storing these items to be about \$700,000 annually. The objective of this audit was to evaluate Westinghouse's management of the stocked inventory at the Savannah River Site.

RESULTS OF AUDIT

Westinghouse was not adequately managing its stocked inventory. The contractor had not identified and disposed of items that: (i) exceeded "maximum" inventory levels, and (ii) had no usage during the last 10 years. The audit disclosed that Westinghouse did not have procedures in place to calculate the amount of stocked inventory necessary for the site's mission. Further complicating the situation, Westinghouse accounting procedures penalized users for identifying and disposing of excess stocked inventory. Specifically, when items were declared excess, removed from inventory, and disposed of, they had to be charged against a specific user's budget account. Thus, the users had little or no incentive to ensure that excess inventories were properly addressed.

We identified stocked inventory with an acquisition cost of about \$9 million that did not appear to be needed. Westinghouse incurred about \$116,000 per year to store these items. These costs were fully reimbursed by the Department. Because Westinghouse did not track revenues or expenses related to excess stocked inventory, a precise calculation regarding overall monetary impact of the inventory situation at Savannah River could not be made. However, it was clear that significant operating economies were possible if excess inventories were disposed of promptly.

The Office of Inspector General has found similar inventory situations at several Departmental facilities. In fact, the issue of property and inventory controls has been identified by this office as one of the top 10 management challenges facing the Department. We believe that a high-level Departmentwide effort is warranted to identify and dispose of excess assets; reduce related storage and maintenance costs; and, develop a system which maximizes operational efficiency by maintaining inventories at appropriate levels.

#### MANAGEMENT REACTION

Management concurred with the finding and recommendations and agreed to initiate corrective actions.

Attachment

cc: Deputy Secretary  
Under Secretary  
Chief Financial Officer

# **STOCKED INVENTORY AT THE SAVANNAH RIVER SITE**

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# OVERVIEW

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## INTRODUCTION AND OBJECTIVE

Westinghouse Savannah River Company (Westinghouse), the Department of Energy's (Department) management and operating contractor at the Savannah River Site, is responsible for managing the majority of stocked inventory stored at the site. As of March 12, 2001, Westinghouse's Asset Management Division maintained about 4.1 million items in its stocked inventory, acquired at a cost of about \$64 million. These inventory items were stored in four central warehouses, six satellite warehouses, and two open yards. Westinghouse estimated the cost directly related to storing these items to be about \$700,000 annually.

The Office of Inspector General (OIG) has previously reported on property management issues. In July 1999, the OIG issued DOE/IG-0450, *The U.S. Department of Energy's Non-Nuclear Materials Inventory at the Kansas City Plant*. The audit concluded that the Department was not effectively identifying and disposing of unneeded non-nuclear materials inventory at its Kansas City Plant. As a result, the Kansas City Plant incurred over \$2 million annually in additional storage costs, and it did not benefit from the revenue that could have been derived from the sale of any marketable portion of the unneeded materials.

The objective of this audit was to determine whether Westinghouse was managing its stocked inventory.

## CONCLUSIONS AND OBSERVATIONS

Westinghouse was not adequately managing its stocked inventory. Specifically, Westinghouse was not identifying and disposing of items that exceeded "maximum" inventory levels or had no usage during the last 10 years. These items had not been identified as excess and disposed of because (1) procedures were not in place to determine how many items of stocked inventory were necessary to meet the site's mission, and (2) accounting procedures discouraged users from reporting stocked inventory as excess. As a result, Westinghouse is incurring about \$116,000 annually to store about \$9 million in stocked inventory that does not appear to be needed. In addition, we could not determine the potential savings associated with the disposal of the items that appeared to be excess because Westinghouse did not track revenues or expenses related to excess stocked inventory. The true savings can be determined only after minimum and maximum inventory levels have been determined.

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This audit identified significant issues that management should consider when preparing its yearend assurance memorandum on internal controls.

(Signed)  
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Office of Inspector General

# MANAGING STOCKED INVENTORY

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## **Westinghouse Did Not Identify and Dispose of Excess Stocked Inventory**

Westinghouse was not adequately managing its stocked inventory. Specifically, Westinghouse had not identified and disposed of items that exceeded maximum inventory levels or had no usage in the last 10 years. As of March 12, 2001, Westinghouse had about 674,000 items in its stocked inventory that exceeded maximum inventory levels. For example, Westinghouse had 40 access control devices, costing \$160,000, which was 38 over the established maximum inventory level of 2. Also, Westinghouse had 739 packs of equipment lockout tags, costing \$12,772, which was 726 over the established maximum inventory level of 13. Based on historical consumption rates, Westinghouse had a 200-year supply of access control devices and a 107-year supply of equipment lockout tags. Thus, the on-hand quantities for the items appeared to be excessive.

In addition, Westinghouse had 8,423 items in its stocked inventory for which there had been no usage in the last 10 years. For example, Westinghouse had 8 ceramic-backed, 90-degree bends, costing \$12,080, even though the item had not been used in 13 years. Also, Westinghouse had 4 left-bank, camshaft drives, costing \$1,208, even though the item had not been used in 14 years. Since neither of these items had been used in over 13 years, they appear to be excessive.

In accordance with the Government Performance and Results Act of 1993, the Savannah River Operations Office (Operations Office) and Westinghouse had established some performance measures in their Annual Operating Plans covering the management of stocked inventory. However, these involved activities such as auctions of excess property and conduct of an Electronic Hand Receipt Program. There were no performance measures directly related to identifying and disposing of stocked inventory.

## **Federal Regulations Require That Westinghouse Identify and Dispose of Excess Stocked Inventory**

Federal property regulations require that the Department and its contractors continuously survey property under their control to assure maximum use. Additionally, the regulations require that the Department and its contractors promptly identify property that is excess to their needs and make excess property available for use elsewhere. If the property cannot be used elsewhere, it should be disposed of in an efficient manner.

## **Westinghouse's Procedures Needed Improvement**

Westinghouse did not identify and dispose of excess stocked inventory items because (1) procedures were not in place to determine how many items of stocked inventory were necessary to meet the site's mission, and (2) accounting procedures discouraged users from reporting stocked inventory as excess.

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Westinghouse did not have procedures in place to calculate the amount of stocked inventory necessary for the site's mission. Instead, Westinghouse's Asset Management Division relied on users to determine minimum and maximum inventory levels using any method deemed appropriate by the user. Some users stated that they estimated the maximum and minimum inventory levels based on their personal experiences. However, users did not have access to the types of information normally used to calculate minimum and maximum inventory levels, such as economic order quantities, procurement lead-time, repair turnaround time, projected changes in usage rates, and loss rates for repairable items. Thus, they did not have the information necessary to accurately determine the amount of stocked inventory needed. When Westinghouse's Asset Management Division was unable to obtain the minimum and maximum inventory levels from users, it arbitrarily set the minimum level at one and the maximum level at two.

In addition, Westinghouse's accounting procedures penalized users for identifying and disposing of excess stocked inventory. Specifically, the accounting procedures required that a user's program be charged for items that were determined to be excess. Westinghouse's stocked inventory was purchased with general site funds and was not charged to users until the stocked inventory was actually used. However, before the items were declared excess, removed from inventory, and disposed of, they had to be charged against a specific user's budget account. These accounting procedures discouraged most users from declaring stocked inventory as excess.

**Avoidable Costs Were Incurred to Store Excess Stocked Inventory**

Westinghouse is incurring an estimated \$116,000 annually to store about \$9 million in stocked inventory items that do not appear to be needed. Storage costs were estimated based on the percentage of stocked inventory items that appeared to be excess (16.6 percent) applied to Westinghouse's estimate of the variable costs to store stocked inventory (\$700,000). We identified about \$4 million of items that exceeded maximum inventory levels and an additional \$5 million of items that had no usage for at least 10 years. By comparison, the Manager for the Asset Management Division estimated that Westinghouse had \$10 million to \$12 million in excess stocked inventory on hand during the audit; however, the Manager had no analytical data to support the estimate.



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Additionally, we could not determine the potential savings associated with the disposal of stocked inventory items that appeared to be excess because Westinghouse does not separately track revenues or expenses related to excess stocked inventory. However, additional savings could be achieved by disposing of excess items. Specifically, by making excess items available for other sites, the Department could avoid the expense of purchasing identical items elsewhere. Also, if the items are not needed elsewhere, the Department could sell them to outside parties. Further, if the excess stocked inventory items were disposed of, Westinghouse could avoid the cost of repairing some of the unneeded items. The true savings can be determined only after minimum and maximum inventory levels are determined.

## **RECOMMENDATIONS**

We recommend that the Manager, Savannah River Operations Office:

1. Direct Westinghouse to:
  - a. Assign responsibility and authority for determining minimum and maximum inventory levels for stocked inventory to the Asset Management Division;
  - b. Develop written procedures for accurately calculating the minimum and maximum quantities of an item to be kept on hand utilizing accepted inventory management techniques, such as economic order quantities and procurement lead-times; and,
  - c. Revise accounting procedures for stocked inventory to remove the penalty for declaring stocked inventory items as excess.
2. Develop performance measures to identify and dispose of excess stocked inventory items.

## **MANAGEMENT REACTION**

Management concurred with the finding and recommendations and agreed to initiate corrective action. The Manager, Savannah River Operations Office issued a letter to the President of Westinghouse, on June 1, 2001, advising of the concurrence with the recommendations in the OIG report. Westinghouse was requested to provide, by June 29, 2001, a list of actions it would take to address all of the recommendations in the report. Management stated

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recommendation 1c requires a change to Department policies relative to accounting and budgeting for inventories before it can direct Westinghouse to implement the change. The Operations Office agreed to develop, propose and pursue appropriate changes to these policies. Two alternatives to current Department policy will be developed and forwarded to the Office of the Chief Financial Officer by July 15, 2001. Regarding recommendation 2, management stated that performance metrics will be developed by July 15, 2001.

**AUDITOR COMMENTS**

Management's planned actions are responsive to the recommendations.

# Appendix

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## SCOPE

The audit was performed from August 21, 2000, to April 20, 2001, at the Savannah River Site near Aiken, South Carolina. The audit covered a review of Westinghouse's stocked inventory as of March 12, 2001.

## METHODOLOGY

To accomplish the audit objective, we:

- Researched Federal and Departmental requirements for managing stocked inventory;
- Reviewed Westinghouse's policies, procedures, and practices for managing stocked inventory;
- Analyzed Westinghouse's stocked inventory as of March 12, 2001; and,
- Selected and performed a small, judgmental sample of consumable and repairable stocked inventory to determine if the inventory on hand as of March 12, 2001, was excess to mission needs at the site.

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, the assessment included reviews of Departmental and contractor policies, procedures, and performance measures related to the management and control of stocked inventory. 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 assessed the reliability of computer generated data by comparing it to independently generated data sources and found the data to be reliable for the purposes of this audit.

Management waived the exit conference on June 21, 2001.

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