



Office of the Inspector General

Audit Report

To the Senior Vice President,
Procurement; and the Vice
President and Controller

MANAGE SITE MATERIAL INTERNAL CONTROL REVIEW

Audit Team
Rick L. Taylor
Gregory R. Stinson

Audit 2005-028F-01
June 15, 2005



Memorandum from the Office of the Inspector General

June 15, 2005

Paul R. LaPointe, ET 5B-K
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REQUEST FOR MANAGEMENT DECISION – AUDIT 2005-028F-01 – MANAGE SITE
MATERIAL INTERNAL CONTROL REVIEW

Attached is the subject final report for your review and management decision. You are responsible for determining the necessary actions to take in response to our findings. Please advise us of your management decision within 60 days of the date of this report.

Information contained in this report may be subject to public disclosure. Please advise us of any sensitive information in this report which you recommend be withheld.

If you have any questions, please contact Rick L. Taylor, Senior Auditor, at (865) 632-7321 or Louise B. Beck, Manager, Financial and Operational Audits, at (865) 632-2622. We appreciate the courtesy and cooperation received from your staff during this review.

Ben R. Wagner
Assistant Inspector General
(Audits and Inspections)
ET 3C-K

RLT:SDB

Attachment

cc (Attachment):

Franklin E. Alford, SP 1A-C
Tom D. Kilgore, ET 12A-K
Carla F. Lewis, ET 5B-K
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OIG File No. 2005-028F-01

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EXECUTIVE SUMMARY

We conducted an audit to assess controls over Tennessee Valley Authority's (TVA) Manage Site Material (MSM) inventoryⁱ process. Our audit included the controls in place as of June 8, 2005. According to Procurement, as of April 30, 2005, TVA's inventory of material was about \$319 million with typical annual inventory receipts of about \$150 million. TVA had 226 employees managing this inventory at 83 TVA locations.

In summary, we found:

- Current inventory cycle count controls may not ensure inventory on-hand is accurately counted and entered into PassPort. During a Fraud Risk Assessment on inventory conducted by the Office of the Inspector General, Procurement personnel identified several potential scenarios in which cycle count results could be inaccurate or misstated with the possibility of going undetected. Since cycle count adjustments affect Procurement's Operation and Maintenance costs (O&M) budget, Procurement's Winning Performance goal of O&M could be influenced by inaccurate cycle count data.
- In some warehouses, access to plant inventories is not restricted to Material Management Services (MMS) personnel or personnel escorted during non-standard work hours by MMS personnel as required by Procurement's policy. Since most storerooms are not staffed by MMS personnel 24 hours a day seven days a week, some plant personnel have been granted access to material inventory. Additionally, Winning Performance goals could add incentives for plant personnel to take material without notifying Procurement of the items taken.
- TVA's Risk Control Tracking System (RCTS) could be updated to more accurately reflect key financial controls of the MSM process. The MSM process in RCTS should be updated to remove non-critical and operational control activities, combine like control activities, remove control activities related to scrap/surplus process, and add control activities considered to be part of the MSM process.

ⁱ For purposes of this report inventory means material inventory.

BACKGROUND

Tennessee Valley Authority's (TVA) Materials Management Services (MMS) within the Procurement organization is responsible for managing TVA's material inventory. As of April 30, 2005, TVA's inventory of material was about \$319 million with typical annual inventory receipts of about \$150 million. TVA had 226 employees managing this inventory at 83 TVA locations.

The primary objectives of the MMS process are to ensure (1) inventory strategies are clearly defined, communicated to, and understood by all employees; (2) inventory received is usable and recorded accurately and timely; (3) only goods which have been ordered are received and recorded in the appropriate period; (4) inventory replenishment points are established; (5) inventory performance is monitored against expected results; (6) all valid charges to the inventory management master file are input and processed accurately; (7) the cycle count strategy is defined, documented, and communicated only to appropriate personnel; (8) only usable material is included in inventory counts; (9) physical inventory counts are performed for all items in inventory; and (10) cycle count results are immediately and accurately entered.

In order to meet these ten primary objectives, Materials Management policies and procedures require personnel to (1) review various inventory reports to monitor inventory performance, (2) perform cycle counts of material inventory and reconcile variances, (3) restrict inventory access to authorized personnel, (4) enter material issues in PassPort in a timely manner, and (5) review material returned to ensure material is in adequate condition to be included in inventory.

OBJECTIVE, SCOPE, AND METHODOLOGY

Our objective was to assess controls over the Manage Site Material (MSM) inventory process. The scope of the audit was MSM process controls as of June 8, 2005. However, we did not perform a detail review of controls related to the scrap/surplus process because the scrap/surplus process is currently under review, Audit 2005-015F. We also included three control activities¹ that were part of the Risk Control Tracking System (RCTS) receive and inspect process. We believe these three controls were better suited to be included in the MSM

¹ Control activity numbers H.2.E.1, H.2.E.3, and H.2.E.4 were controls that related to issues and returns of material which were better suited for the MSM process than the receive and inspect process.

process. We obtained an understanding of controls and processes relating to managing site material inventory by:

- Accessing RCTS to obtain all the related information/documentation for the MSM process.
- Interviewing Procurement personnel to gain an understanding of the MSM process and obtain additional control documentation.
- Using information obtained to document and flowchart the MSM process.
- Conducting a walkthrough of the process with Procurement personnel to (1) confirm our understanding of the process and key control activities, (2) identify areas where process and/or control documentation needs to be prepared or updated, and (3) identify any additional mitigating control activities.
- Participating in a Fraud Risk Assessment with Procurement and Office of the Inspector General Investigative personnel to identify possible fraud schemes and weaknesses in internal controls related to management site material inventory.
- Using information obtained in the walkthrough and Fraud Risk Assessment to assess the control design and documentation.

This audit was performed in accordance with generally accepted government auditing standards. Although we did not test for compliance with laws and regulations, nothing came to our attention during the audit that indicated noncompliance with laws and regulations.

FINDINGS

We found the control design does not adequately ensure cycle count data is accurate or restrict access. In addition, we noted TVA's RCTS could be updated to more accurately reflect key financial controls of the MSM process. The MSM process in RCTS should be updated to remove non-critical and operational control activities, combine like control activities, remove control activities related to scrap/surplus process, and add control activities considered to be part of the MSM process.

CYCLE COUNT

Current inventory cycle counts process may not ensure inventory on-hand is accurately counted and entered into PassPort because the control activities would not necessarily detect if Procurement personnel: (1) overstated the actually quantity counted, (2) scrapped items that were missing, (3) created issue tickets for missing items, (4) listed missing items as being included with other transfers to Hartsville, or (5) entered the quantity on-hand listed in PassPort as the cycle count result without actually performing a count of the item. Since cycle count adjustments affect Procurement's Operation & Maintenance costs (O&M) budget, Procurement's Winning Performance goal of O&M could be influenced by Procurement personnel not reporting cycle count shortages.

ACCESS TO MATERIAL INVENTORY

Access to some plant inventories is not restricted to MMS personnel or personnel escorted by MMS personnel as required by Procurement's policy. Since most storerooms are not staffed by MMS personnel 24 hours a day, some plant personnel have been granted access to material inventory. There is no policy or procedure to ensure material taken is entered into PassPort when MMS personnel are not present. Additionally, Winning Performance goals could add an incentive for plant personnel to take material without notifying Procurement of the items taken. The items taken will not be charged to the plant's O&M budget but will be charged to Procurement's O&M budget when the shortage is identified. This aids a business unit in meeting its Winning Performance goals in relation to O&M budget.

RCTS ISSUES

We identified the following issues concerning the MSM process documentation in RCTS:

- RCTS MSM process should be updated to delete the following non-critical controls. We discussed these controls with Procurement management and they agreed these are not key financial controls.
 1. "The inventory placement requirements and cycle count criteria are developed in accordance with the ABC strategy" is not a key control because all items are counted with the same frequency (at least once every 24 months). (RCTS Control Number H.1.A.1)

2. "Recorded changes to inventory master file data are compared to authorized source documents to ensure that they were input accurately" is not performed but there are other mitigating controls to address this issue. (RCTS Control Number H.1.F.2)
 3. "Inventory aging reports are prepared and analyzed prior to inventory cycle counts" is not performed by Procurement. (RCTS Control Number H.1.H.1)
 4. "Access to create, modify, and print physical inventory documents for cycle counting is restricted to authorized personnel" is not considered a key control of Procurement because access to PassPort is controlled by Information Systems. (RCTS Control Number H.1.I.1)
 5. "Access to Usage Based ABC Analysis is restricted to authorized personnel" is not a key control because all items are counted with the same frequency (at least once every 24 months). (RCTS Control Number H.1.I.2)
 6. "Transactions for goods received at, before, or after the end of an accounting period are scrutinized and/or reconciled to ensure complete and consistent recording in the appropriate period" is not considered a key control for Procurement because Chief Financial Officer's organization is responsible for ensuring transactions are recorded in the appropriate time period. (RCTS Control Number H.1.C.1)
- RCTS MSM process should be updated to delete the following controls determined to be operational controls. We discussed these controls with Procurement management and they agreed these are operational controls.
 1. "Stock replenishment policies are periodically reviewed to ensure policies meet changing company needs." (RCTS Control Number H.1.C.2)
 2. "Stock level policies are established to include replenishment cycles, safety stock levels, slow moving inventory, etc., and the plan has been communicated to the appropriate personnel. Policies are periodically reviewed for continued applicability." (RCTS Control Number H.1.D.1)

- RCTS MSM process should be updated to combine the following controls. The controls listed under item number one should be combined because they all address the documentation and communication of policies and procedures. The controls listed under item number two relate to cycle count controls that can be combined into one key control.
 1. The following four controls should be combined into one overall control related to communicating policies and procedures. “The procurement strategy, as well as any detailed criteria for making purchases and utilization of intercompany transfers, is documented and communicated by management to the appropriate personnel to ensure all purchasing actions and decisions are consistently performed” (RCTS Control Number H.1.A.2); “Procedures on how to run the analysis reports for cycle counting and how often the cycle count indicators for materials are reset have been developed and communicated to the appropriate personnel” (RCTS Control Number H.1.G.1); “The cycle count strategy, as well as any detailed criteria for cycle counts, is documented and communicated by management to the appropriate personnel to ensure all cycle count actions and decisions are consistently performed” (RCTS Control Number H.1.G.2); and “A procedure has been established and communicated guiding the material issue process. The procedure includes that the material is required to be issued to an order (transfer, work, disposal, etc.) within an established time period after the inventory has been picked” (RCTS Control Number H.2.E.4).
 2. The following four controls should be combined into one overall key control relating to cycle counts. “Management reviews and approves all recorded adjustments to inventory prices, quantities, and qualities” (RCTS Control Number H.1.J.1); “Policies for reviewing any inventory differences and related decision making have been established and communicated. The List of Inventory Differences Report and necessary recounts are reviewed and approved by the plant management after counts are entered into PassPort and prior to posting a difference in the general ledger” (RCTS Control Number H.1.J.3); “All cycle count variances are reconciled and approved by someone other than the counter (Foreman or higher position) before the quantity is accepted. Corrective actions are identified if necessary” (RCTS Control Number H.1.J.4); and “Inventory counts are reconciled to inventory records” (RCTS Control Number H.1.J.5).

- Although we did not perform a detailed review of the scrap/surplus controls, we determined the scrap/surplus controls warrant a separate process and should not be included in the MSM process. The controls include: “management reviews reports of slow-turnover material to ensure that it is still usable” (RCTS Control Activity H.1.B.1); “Procedures related to scrap, surplus, or obsolete material (including the negotiation process and relevant authorizations needed to complete the disposal, the parameters that indicate an item is to be disposed, definitions of disposal categories, and documentation required for final issue or delivery of disposed inventory) have been established and communicated to all affected personnel” (RCTS Control Activity H.1.H.3); “Write off quantity is determined in accordance with policies by authorized personnel and documented appropriately. Reasons for writing material off are shelf life expiration, damage, no need within the corporation, no value, or the material is obsolete” (RCTS Control Activity H.1.H.4); and “Management reviews inventory records for impairment whenever events or changes in circumstances indicate that the carrying amount of an asset may not be recoverable” (RCTS Control Activity H.1.J.2).
- RCTS MSM process should be updated to include control activities from the RCTS Receive and Inspect process related to issues and returns of material. Procurement Management agreed these three control activities should be included in the MSM process. These controls included: “All internal issuances and returns are accompanied by the appropriate documentation, including the original issue document or properly completed credit issue document” (RCTS Control Activity H.2.E.1); “The actual quantity of each material that is physically picked for a pick ticket is entered in the system only by authorized personnel” (RCTS Control Activity Number H.2.E.3); and “A procedure has been established and communicated guiding the material issue process. The procedure includes that the material is required to be issued to an order (transfer, work, disposal, etc.) within an established time period after the inventory has been picked (RCTS Control Activity Number H.2.E.4).

RECOMMENDATIONS

We recommend Procurement implement additional monitoring activities to ensure the cycle count and storage access controls operate as intended.

In addition, we recommend Procurement take corrective action to address the RCTS issues described above.