

STANDARDS AND EMERGING ISSUES ADVISORY GROUP MEETING

DISCUSSION – AUDITING INVENTORY

NOVEMBER 2, 2023

I. INTRODUCTION

The PCAOB's expects to add to its standard-setting agenda a project to consider changes to auditor's requirements for auditing inventories to better align with the auditor's risk assessment, increased decentralization of company's operations, and to address the increasing use of technology tools in both auditing and maintaining inventories, including whether to revise AS 2510, *Auditing Inventories*.¹

At the November 2023 meeting, members of the PCAOB's Standards and Emerging Issues Advisory Group (SEIAG) will discuss their views and experiences regarding topics relating to auditing inventories. This briefing paper is intended to facilitate a focused SEIAG discussion regarding auditing inventories by providing background information and describing: (i) observation of inventory and related auditing procedures; (ii) advances in technology in reporting and auditing of inventory; (iii) use of a third-party in the inventory process; and (iv) key inventory-related matters discussed with audit committees.

In addition, the Board is interested in whether SEIAG members are aware of academic research papers, external reports, or other information sources for evaluating potential economic impacts of

¹ AS 2510 (see Appendix) addresses the auditor's responsibilities to observe inventories. The standard does not deal with other important auditing procedures which generally are required for the auditor to opine on the fair presentation of these assets.

This document was developed by the staff of the Office of the Chief Auditor to foster discussion among the members of the Standards and Emerging Issues Advisory Group at the November 2, 2023 meeting. It is not a statement of the Board, nor does it necessarily reflect the views of the Board, any individual Board member, or PCAOB staff.

modifying PCAOB standards relating to auditing inventories or providing additional perspectives on this topic that should be taken into consideration.

II. OVERVIEW OF EXISTING AUDITING STANDARD AS 2510, AUDITING INVENTORIES

PCAOB standards require the auditor to design and perform substantive audit procedures that address the assessed risks of material misstatement for each relevant assertion of each significant account and disclosure.² AS 2510, *Auditing Inventories*, is an interim standard that provides guidelines for the independent auditor in observing inventories.

The auditor's requirements within AS 2510 are some of the oldest among those currently codified within PCAOB standards. Much of the current day rule text is consistent with language first adopted in 1939 by the AICPA in its first Statement on Auditing Procedures as a result of the McKesson & Robbins fraud case, one of the major financial scandals of the 20th century.³ Prior to this fraud, auditors typically only tested transactions and did not directly observe the physical counting of inventory by the company.

The standard indicates that the observation of inventories is a generally accepted auditing procedure, and the auditor has the burden of justifying the opinion expressed when observation is not performed. In addition, the standard:

- Describes the nature and timing of audit procedures when inventory is only counted at year end, and for situations where well-kept perpetual inventory records are maintained and periodically compared to physical counts.
- Establishes that tests of accounting records alone are not sufficient and that it will always be necessary for the auditor to make, or observe, some physical counts and test intervening transactions.
- Provides guidance for circumstances where the auditor may not be able to perform an inventory observation.⁴
- Includes requirements for inventory held in public warehouses.
- Directs the auditor to AS 3105, *Departures from Unqualified Opinions and Other Reporting Circumstances* when the auditor encounters circumstances that restrict the auditor's inventory procedures and the effect on the auditor's report.

Since the standard was written:

² See paragraphs .08 and .36 of AS 2301, *The Auditor's Responses to the Risks of Material Misstatement*

³ See Accounting Series Release No. 19, *In the Matter of MCKESSON & ROBBINS, INC.*, File No. 1-1435 (Dec. 5, 1940)

⁴ There may be situations in which the auditor is unable to attend a physical inventory count. These limited situations might include first year audits, carve-out audits, re-audits, audits where the auditor was appointed after period-end, audits of acquired companies, and situations where observation would introduce safety violations (e.g., related to the COVID-19 pandemic, or local security concerns).

- Beginning in 2010, the Board issued certain fundamental auditing standards addressing areas of auditor responsibilities related to identifying, assessing, and responding to risks of material misstatement to the financial statements,⁵ the use of specialists,⁶ and other auditors performing work on the audit.⁷
- There have been advancements in the use of technology-based tools by auditors and issuers in the inventory management process, which may affect how auditor’s perform inventory observation procedures and could result in new potential risks for the auditor to consider.

III. OBSERVATION OF INVENTORY AND RELATED AUDITING PROCEDURES

Observation of inventory is a generally accepted auditing procedure to obtain audit evidence over the existence and condition of inventory recorded in a company’s financial statements. The policies and procedures for performing inventory test counts and observing the company’s counts can differ from audit to audit. During an inventory observation, the auditor can perform a number of other procedures to gather audit evidence in relation to the existence and condition of inventory. These may include:

- Inspecting the condition of inventory, including determining whether any inventory appears to be obsolete or slow moving.
- Testing the accuracy of the inventory descriptions.
- Evaluating the thoroughness of the company’s count instructions.
- Supervising and evaluating the performance of the counters.
- Observing the inventory tag control process

⁵ See *Auditing Standards Related to The Auditor’s Assessment of and Response to Risk and Related Amendments to PCAOB Standards*, PCAOB Release No. 2010-004 (Aug. 5, 2010). The standards adopted included AS No. 12, *Identifying and Assessing Risks of Material Misstatement*, AS No. 13, *The Auditor’s Responses to the Risks of Material Misstatement*, and AS No. 15, *Audit Evidence*. In 2015, the PCAOB reorganized its auditing standards using a topical structure and a single, integrated number system, and these standards were designated as AS 2110, AS 2301, and AS 1105, respectively. See *Reorganization of PCAOB Auditing Standards and Related Amendments to PCAOB Standards and Rules*, PCAOB Release No. 2015-002 (Mar. 31, 2015). The reorganization did not impose additional requirements on auditors or change substantively the requirements of PCAOB standards.

⁶ See *Amendments to Auditing Standards for Auditor’s Use of the Work of Specialists*, PCAOB Release No. 2018-006. This includes amendments that: (1) revise AS 1105, *Audit Evidence*; AS 1201, *Supervision of the Audit Engagement*; AS 2101, *Audit Planning*; AS 2110, *Identifying and Assessing Risks of Material Misstatement*; and AS 2505, *Inquiry of a Client’s Lawyer Concerning Litigation, Claims, and Assessments*; (2) replace AS 1210, *Using the Work of a Specialist*, and retitle the standard as *Using the Work of an Auditor-Engaged Specialist*; and (3) make additional conforming amendments.

⁷ See *Planning and Supervision of Audits Involving Other Auditors and Dividing Responsibility for the Audit with Another Accounting Firm*, PCAOB Release No. 2022-002. This includes amendments that: (1) revise AS 1015, *Due Professional Care in the Performance of Work*; AS 1105, *Audit Evidence*; AS 1201, *Supervision of the Audit Engagement*; AS 1215, *Audit Documentation*; AS 1220, *Engagement Quality Review*; and AS 2101, *Audit Planning*; (2) rescind AS 1205, *Part of the Audit Performed by Other Independent Auditors*, and AI 10, *Part of the Audit Performed by Other Independent Auditors: Auditing Interpretations of AS 1205*; (3) adopt AS 1206, *Dividing Responsibility for the Audit with Another Accounting Firm*; and (4) make additional conforming amendments.

Furthermore, during an inventory observation, the auditor may perform procedures responsive to a fraud risk. These may include looking for empty boxes or “hollow squares” in stacked goods, or mislabeled boxes containing scrap or low value material. In addition, the auditor may evaluate whether to engage an expert or specialist to assist them during an inventory observation. For example, a specialist or expert might be engaged to assist the auditor during an inventory observation to determine the nature of chemical substance stored in a tank or the weight of stones extracted in a quarry.

Questions for discussion

1. Observation of inventory is a generally accepted auditing procedure to obtain audit evidence over inventory recorded in a company’s financial statements. In your experience, are there other, even potentially more effective, auditing procedures to obtain audit evidence over the existence and condition of inventory? Are there circumstances where an inventory observation may not be necessary?
2. When an inventory observation is performed, are there questions in practice about the extent of the physical observation procedures required? If so, what are they?
3. We intend to adopt standards that are scalable for all audits based on their nature and circumstances. To promote this, how could the standard be better integrated with the auditor's risk assessment?

IV. ADVANCES IN TECHNOLOGY IN REPORTING AND AUDITING OF INVENTORY

Since the requirement to observe inventories was established in 1939, there have been significant advancements in the capabilities and application of technology in the inventory management process and the auditing of inventory. In the current day environment, the use of technology is pervasive throughout the inventory management process, from the purchasing and receiving of inventory, to the warehousing, and ultimately to the sale and shipping of inventory. In addition, during the COVID-19 pandemic, due to security concerns and social distancing protocols, physical attendance by the auditor during an inventory observation may not have been possible. This led to a rapid shift towards remote auditing which forced auditors to employ the use of virtual conferencing tools as part of the inventory observation procedures.

Performing inventory counts virtually, while still providing observation evidence, may not provide the same level of evidence as an in-person observation. For example, during a virtual inventory observation, it may be more difficult for the auditor to reliably identify what is being counted due to the nature of the inventory, e.g., small items or chemical compounds. In addition, the auditor’s ability to observe the entire facility may be impeded due to reliance on the facility staff in virtually walking the auditor through the facility. In such cases, the auditor’s ability to confirm lack of movement of inventory during the count, observe whether any slow-moving/obsolete inventory appears to be present, and to assess the condition of inventory may be limited.

Questions for discussion

4. How is technology being used today or will potentially be used in the future for inventory observation (e.g., drones)? Could virtual observations completely substitute for in person attendance, or should they be used in combination with attending inventory counts in person?

5. Some audit strategies include the performance of virtual inventory counts. Are there additional risks present when observing inventory virtually beyond what is mentioned above and if so, what are they. How can the risks sufficiently be overcome?
6. Where virtual inventory counts are performed (that is, there is no physical presence by an engagement team member), what additional procedures, if any, are performed to verify the existence and condition of physical inventories?

V. USE OF A THIRD-PARTY IN THE INVENTORY PROCESS

In recent years, there has been an increase in companies' use of third-party custodians, public warehouses, and third-party count services. This has been due to both a shift from brick-and-mortar retail to eCommerce, as well as strategic decision making by companies to outsource inventory warehousing to lower costs and focus on their core competencies. The use of a third-party custodian or public warehouse may allow a company to leverage another company's existing infrastructure, equipment, and employees to store and manage the company's inventory. Similarly, a third party-count service may be used to perform inventory counts on behalf of management. This may allow a company to maintain a lower employee headcount while also providing an unbiased count that potentially lowers the risk of theft and counting errors.

If a company uses a third-party custodian, public warehouse, or third-party count service, then the auditor would typically consider whether the audit plan needs to be modified to obtain sufficient and appropriate audit evidence over the existence of inventory. For example, the auditor could consider whether there are circumstances or controls at the company that address the risks associated with the use of a third-party custodian or count service. Where there is less oversight and involvement by the company in the outsourced operations, then the auditor might consider whether there are controls at the third-party custodian or implemented by the count service that address the existence of inventory and the completeness and accuracy of the count data. If the company relies on controls at the third-party custodian or implemented by the count service, then the auditor could determine if a system and organization controls report ("SOC report") exists. If so, such report could be obtained and evaluated.

Question for discussion

7. Where inventory is held at a third-party custodian or public warehouse, are SOC reports that address control procedures relevant to the custody and maintenance of such inventory typically available? If not, what other procedures are commonly performed to obtain reasonable assurance with respect to the existence of such inventory?
8. When a company uses a third-party count service to perform the physical inventory count, what procedures are performed by the auditor related to the count service, including any procedures over controls that address the existence and condition of inventory, as well as the completeness and accuracy of count data?

VI. KEY INVENTORY-RELATED MATTERS DISCUSSED WITH AUDIT COMMITTEES

PCAOB standards require the auditor to communicate with the company's audit committee regarding certain matters related to the conduct of an audit and to obtain certain information from the

audit committee relevant to the audit.⁸ This includes communicating the overall audit strategy and the results of the audit.

The standards do not currently require any specific communications between the auditor and the audit committee regarding the observation of inventories. However, we understand through our conversations with audit committee chairs that audit firms may communicate to the audit committee certain related matters such as where new or emerging technologies, such as drones, are being used in the observation of inventory. In addition, if the auditor uses another independent public accounting firm or other person not employed by the auditor to perform audit procedures in the current period, such as an inventory observation, then the auditor is required to communicate this to the audit committee as part of the overall audit strategy.⁹

To the extent that the auditor communicates or is required to communicate any matter relating to the observation of inventories that (1) relates to accounts or disclosures that are material to the financial statements and (2) involved especially challenging, subjective, or complex auditor judgment, PCAOB standards require these matters to be identified as critical audit matters (“CAMs”).¹⁰ We have observed some CAMs relating to the existence and condition of inventories, for example where the measurement of the physical quantities of certain inventory types (such as mined metal inventory in process) is complex and requires significant estimation.

Questions for discussion

9. Is there information that the audit committee or investors would benefit from knowing about the auditor’s decision, e.g., if an auditor does not perform an inventory observation?
10. Are there matters relating to the observation of inventory that are considered in the identification of CAMs? What matters relating to inventory observation, if any, would audit committees and investors expect to see as CAMs?

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⁸ See AS 1301, *Communications with Audit Committees*.

⁹ See AS 1301.10d.

¹⁰ See AS 3101, *The Auditor’s Report on an Audit of Financial Statements When the Auditor Expresses an Unqualified Opinion*

APPENDIX

AS 2510: Auditing Inventories

01 Observation of inventories is a generally accepted auditing procedure. The independent auditor who issues an opinion when he has not employed them must bear in mind that he has the burden of justifying the opinion expressed.

.02 The purpose of this section is to provide guidelines for the independent auditor in observing inventories. This section relates only to observation of inventories and does not deal with other important auditing procedures which generally are required for the independent auditor to satisfy himself as to these assets.

Receivables

[.03-.08] [Paragraphs deleted.]

Inventories

.09 When inventory quantities are determined solely by means of a physical count, and all counts are made as of the balance-sheet date or as of a single date within a reasonable time before or after the balance-sheet date, it is ordinarily necessary for the independent auditor to be present at the time of count and, by suitable observation, tests, and inquiries, satisfy himself respecting the effectiveness of the methods of inventory-taking and the measure of reliance which may be placed upon the client's representations about the quantities and physical condition of the inventories.

.10 When the well-kept perpetual inventory records are checked by the client periodically by comparisons with physical counts, the auditor's observation procedures usually can be performed either during or after the end of the period under audit.

.11 In recent years, some companies have developed inventory controls or methods of determining inventories, including statistical sampling, which are highly effective in determining inventory quantities and which are sufficiently reliable to make unnecessary an annual physical count of each item of inventory. In such circumstances, the independent auditor must satisfy himself that the client's procedures or methods are sufficiently reliable to produce results substantially the same as those which would be obtained by a count of all items each year. The auditor must be present to observe such counts as he deems necessary and must satisfy himself as to the effectiveness of the counting procedures used. If statistical sampling methods are used by the client in the taking of the physical inventory, the auditor must be satisfied that the sampling plan is reasonable and statistically valid, that it has been properly applied, and that the results are reasonable in the circumstances.

.12 When the independent auditor has not satisfied himself as to inventories in the possession of the client through the procedures described in paragraphs .09 through .11, tests of the accounting records alone will not be sufficient for him to become satisfied as to quantities; it will always be necessary for the auditor to make, or observe, some physical counts of the inventory and apply appropriate tests of intervening transactions. This should be coupled with inspection of the records of any client's counts and procedures relating to the physical inventory on which the balance-sheet inventory is based.

.13 The independent auditor may be asked to audit financial statements covering the current period and one or more periods for which he had not observed or made some physical counts of prior inventories. He may, nevertheless, be able to become satisfied as to such prior inventories through appropriate procedures, such as tests of prior transactions, reviews of the records of prior counts, and the application of gross profit tests, provided that he has been able to become satisfied as to the current inventory.

Inventories Held in Public Warehouses

.14 If inventories are in the hands of public warehouses or other outside custodians, the auditor ordinarily would obtain direct confirmation in writing from the custodian. If such inventories represent a significant proportion of current or total assets, to obtain reasonable assurance with respect to their existence, the auditor should apply one or more of the following procedures as he considers necessary in the circumstances.

- a. Test the owner's procedures for investigating the warehouseman and evaluating the warehouseman's performance.
- b. Obtain an independent accountant's report on the warehouseman's control procedures relevant to custody of goods and, if applicable, pledging of receipts, or apply alternative procedures at the warehouse to gain reasonable assurance that information received from the warehouseman is reliable.
- c. Observe physical counts of the goods, if practicable and reasonable.
- d. If warehouse receipts have been pledged as collateral, confirm with lenders pertinent details of the pledged receipts (on a test basis, if appropriate).

Effect on the Auditor's Report

.15 For a discussion of the circumstances relating to receivables and inventories affecting the independent auditor's report, see paragraphs .07 and .51 of AS 3105, *Departures from Unqualified Opinions and Other Reporting Circumstances*.