

Antiock Hardware: An Inventory Case Study

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This case study presents a scenario where an error in the inventory valuation, that may prove to be significant, was found by the external auditor of a large wholesale hardware distributor during the course of their audit. Since the objective of all audit clients is to obtain an unqualified opinion, the case focuses on the ability of the client to correct the error to the extent possible and the procedures the external auditor must perform in order to determine that the corrected inventory valuation is not materially incorrect. The case also addresses the impact the detection of the error has on the external auditor's opinion on internal control and the implications it has on the rest of the audit process.

You are assigned as the audit manager for a large wholesale distributor of hardware called Antiock Hardware. Your audit team has been in the field for the year-end fieldwork for about a week. The audit staff performing the inventory cost testing found a significant error in the calculation for average cost, the cost methodology that the company uses to value its inventory. The calculation that is currently included in the computer program that calculates average cost is:

$$\frac{\text{Current cost X prior quantity} + \text{prior cost X current quantity}}{\text{Current quantity} + \text{prior quantity}}$$

The calculation that should be used is:

$$\frac{\text{Current cost X current quantity} + \text{prior cost X prior quantity}}{\text{Current quantity} + \text{prior quantity}}$$

The in-charge accountant has looked into the matter and the program change documentation indicates that the program that calculates average cost has not been modified since June of the year under audit. The change should not have included a change to the calculation for average cost, but it may have been inadvertently changed at that time. Regardless of when it was changed, it appears it has been that way for at least seven months.

It was also determined that the client can recreate the inventory file as of October 31 of the year under audit and apply all of the inventory transactions for November and December. It has also been determined that they do not have any transaction history prior to that date in their data base. You have also spoken with the controller who has ensured you that you will have access to any resources she has at her disposal in order for this to have a successful conclusion.

Your in-charge auditor has also provided you information about the client's inventory for the last three years to help you decide what the audit team should do to address the problem identified and to determine if they can perform sufficient audit work to attest to the valuation of the year-end inventory.

	2010	2011	2012
Sales	42,168,425	44,066,004	46,225,238
Cost of Goods sold	28,167,145	29,431,568	30,874,180
Inventory	695,658	729,624	764,348
Gross profit margin	33.20%	33.21%	33.21%
Days inventory	9.01	9.05	9.04
Cost comparisons per Category			
1	2,506,876	2,637,069	2,753,977
2	3,323,723	3,461,152	3,646,241
3	5,239,089	5,486,044	5,751,860
4	10,759,849	11,195,769	11,797,024
5	6,337,608	6,651,534	6,925,078
Cost of Goods sold	28,167,145	29,431,568	30,874,180
Obsolescence reserve	12,021	12,258	6,186

Required: You, the audit manager, have informed the audit partner of the potential problem that exists at Antiock Hardware. She requested that you prepare a memo to her after you have fully analyzed the situation. She specifically asked you to address the following points.

1. Is this error material?
2. Is there anything the client could do to make the situation better? Be as specific as possible.
3. Do you think you can issue an unqualified opinion on the financial statements if you receive what you requested from the client in question 2? Why or why not?
4. What additional audit procedures would you have to perform to address the impact of your detection of the inventory calculation error and the subsequent processes the client performed in order to determine that inventory is not materially incorrect?
5. Is there any additional information that you can reasonably expect to receive that would help you in completing the four previous steps?
6. Since this is a public company, can you issue an unqualified opinion on internal control? Identify the material error in internal control if you believe one exists.
7. How does the detection of this error affect the other areas of the audit?