

# ASD INTERNAL AUDIT REPORT

2023-01

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Student Nutrition Warehouse Inventory Controls

Anchorage School District

February 24, 2023

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**MUNICIPALITY OF ANCHORAGE**  
**MAYOR DAVE BRONSON**

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**OFFICE OF INTERNAL AUDIT**

February 24, 2023

Anchorage School District Superintendent and Members of the School Board:

I am pleased to present for your review **ASD Internal Audit Report 2023-01, Student Nutrition Warehouse Inventory Controls, Anchorage School District**. A summary of the report is presented below.

We have completed an audit of the Anchorage School District's Student Nutrition Warehouse Inventory Controls. The objective of this audit was to determine the adequacy of internal controls for receiving, storing, issuing, and accounting for inventory in the Student Nutrition Department's warehouse. To achieve our objective, we interviewed Student Nutrition Department staff to identify internal controls and responsibilities for managing inventory. We also conducted our own inventory of selected item and reviewed inventory adjustments.

Overall, inventory controls and procedures at the Student Nutrition Department warehouse need improvement. Specifically, the food warehouse, including the cold storage section, was not properly organized and maintained and the warehouse location field in PrimeroEdge was not used to record where items were located. In addition, user privileges for PrimeroEdge did not always appear reasonable and necessary and the inventory adjustment process used by the Student Nutrition Department warehouse staff resulted in questionable adjustments. Furthermore, on-hand inventory balances in PrimeroEdge were not accurate and the July 27, 2022, Student Nutrition Warehouse Item Status report showed 72 of 312 (23%) active items with negative balances, with 38 of these items having negative balances in the hundreds. Moreover, "Best by Dates" were not used to manage the items stored in the warehouse and the warehouse lacked standard operating procedures for PrimeroEdge users that outlined specific processes for completing warehouse tasks. Finally, although security had improved since our last audit, the food warehouse was still not adequately secured to prevent unauthorized access.

There were nine findings in connection with this audit. Management was responsive to the findings and recommendations.

Michael Chadwick, CIA, CICA  
Director, Internal Audit



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**OFFICE OF INTERNAL AUDIT**

February 24, 2023

**ASD Internal Audit Report 2023-01**  
**Student Nutrition Warehouse Inventory Controls**  
**Anchorage School District**

**Introduction.** The Anchorage School District's (ASD) Student Nutrition Department (Student Nutrition) maintains a warehouse with over 300 stock items consisting of dry and frozen foods and supplies to support food production and distribution to approximately 80 schools. The warehouse delivers food orders to the schools and issues items to the Central Kitchen, which prepares pans of food and single-serve meals, such as chicken drumsticks with mashed potatoes. The Central Kitchen operates adjacent to the warehouse. Since 2021 Student Nutrition staff have been using PrimeroEdge software to manage the warehouse inventory. Annual physical inventory counts are conducted to check the validity of records in PrimeroEdge.

**Objective and Scope.** The objective of this audit was to determine the adequacy of internal controls for receiving, storing, issuing, and accounting for inventory in the Student Nutrition warehouse. To achieve our objective, we interviewed Student Nutrition staff to identify internal controls and responsibilities for managing inventory. We also conducted our own inventory of selected item and reviewed inventory adjustments.

We conducted this performance audit in accordance with generally accepted government auditing standards, except for the requirement of an external quality control review. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives. The audit was requested by the Anchorage School Board Finance Committee.

**Overall Evaluation.** Inventory controls and procedures at the Student Nutrition warehouse need improvement. Specifically, the food warehouse, including the cold storage section (freezer), was not

properly organized and maintained and the warehouse location field in PrimeroEdge was not used to record where items were located. In addition, user privileges for PrimeroEdge did not always appear reasonable and necessary and the inventory adjustment process used by the Student Nutrition warehouse staff resulted in questionable adjustments. Furthermore, on-hand inventory balances in PrimeroEdge were not accurate and the July 27, 2022, Student Nutrition Warehouse Item Status report showed 72 of 312 (23%) active items with negative balances, with 38 of these items having negative balances in the hundreds. Moreover, "Best by Dates" were not used to manage the items stored in the warehouse and the warehouse lacked standard operating procedures for PrimeroEdge users that outlined specific processes for completing warehouse tasks. Finally, although security had improved since our last audit, the food warehouse was still not adequately secured to prevent unauthorized access.

## FINDINGS AND RECOMMENDATIONS

### 1. Warehouse Not Properly Organized.

- a. **Finding.** The food warehouse, including the freezer, was not properly organized and maintained. Food items were stored in numerous locations and in the aisles making it difficult to find items. For example, during our inventory count we were unable to find all the chicken strips in the freezer as they were stored in nearly every aisle. Some of those sections had newly delivered product blocking aisle access to older product. In addition, while rows were labeled the storage racks were not assigned bin labels.
- b. **Recommendation.** The Student Nutrition Director should reorganize the warehouse, including the freezer section, with each item placed in the same numbered bin location. Items should not be stored in aisles and should be easily accessible to warehouse employees.
- c. **Management Comments.** Management stated, "Management agrees with the recommendation that there needs to be improvement in the organization of the warehouse, including the freezer section. The isle and bin numbers are assigned.

However, the location level is not. We will review how to assign levels within the bins after we review the capabilities of Intelliscan scanning software available through PrimeroEdge.”

- d. **Evaluation of Management Comments.** Management comments were responsive to the audit finding and recommendation.

2. **Warehouse Locations Not Used.**

- a. **Finding.** The warehouse location field in PrimeroEdge was not used to record where items were located. Student Nutrition warehouse staff stated it would be a cumbersome and ineffective process since locations would need to be updated every time an item was moved, requiring an additional employee to be hired for the process. In addition, the bin location feature in PrimeroEdge had not been setup. Without specific and accurate warehouse locations, retrieving items from the warehouse was inefficient and resulted in items being stored in multiple locations. For example, when we conducted our inventory, we found boxed cereal was stored in multiple aisles including different sections within each of the aisles. In another case, we found beef patties were stored in almost every aisle of the freezer. Consequently, it was difficult to ensure that the oldest products were used first. Anchorage School District Food Safety Standard Operating Procedures 2022-2023 states employees will “. . . check that you use the oldest stock first. Practice FIFO: First In First out [sic] stock rotation method.” A similar condition was reported in ASD Internal Audit Report 2015-02 and ASD Internal Audit Report 2018-03.
- b. **Recommendations.** The Student Nutrition Director should ensure that warehouse locations are entered in the location field in PrimeroEdge. The warehouse should be organized with standard locations for each product and clearly marked with a location identifier. New shipments should be stored in the standard location and not moved to other locations. Additionally, use of the PrimeroEdge inventory scanner, Intelliscan,

should be considered to ensure FIFO is being utilized as well as implementing PrimeroEdge's bin location feature.

- c. **Management Comments.** Management stated, "Management agrees with the recommendation that there needs to be improvement in being able to accurately locate all products within the warehouse. We will review the capabilities of PrimeroEdge and Intelliscan to see how we can implement using storage locations in PrimeroEdge."
- d. **Evaluation of Management Comments.** Management comments were responsive to the audit finding and recommendations.

3. **Questionable PrimeroEdge Privileges.**

- a. **Finding.** User privileges for PrimeroEdge did not always appear reasonable and necessary. As a business practice, and to promote internal control, only essential personnel should have the ability to adjust and receive inventory, and to change product prices in PrimeroEdge. We reviewed the privileges for users who had access to the transfers/withdraws category which allows users to add inventory, adjust inventory, and reject inventory transfers. We also reviewed privileges for users who had access to the orders category, that allows users to adjust the receiving price of inventory, adjust receipts, and override delivery schedule. We found 28 of 34 users at the Student Nutrition warehouse had access to update inventory numbers in PrimeroEdge and 26 of 34 users had access to update the orders category.

By giving non-essential personnel access to modify inventory, PrimeroEdge's data integrity may be compromised. In addition, a user may inadvertently modify data, without management approval. Finally, limiting user access may make it easier for management to resolve issues and promote accountability with staff.

- b. **Recommendation.** The Student Nutrition Director review PrimeroEdge user privileges for appropriate access.
- c. **Management Comments.** Management stated, "Management agrees with the recommendation of not allowing questionable access. We have reviewed access and removed employees that should not have access. In addition, a semi-annual task has been added to the checklist to review PrimeroEdge access."
- d. **Evaluation of Management Comments.** Management comments were responsive to the audit finding and recommendation.

4. **Inadequate Adjustment Process on Item History Report.**

- a. **Finding.** The inventory adjustment process used by the Student Nutrition warehouse staff resulted in questionable adjustments. These adjustments were not always supported by adequate explanations such as who made the adjustments and why the adjustments were needed. To make an adjustment a drop down menu is used to selected the adjustment type, such as "Add to Inventory" or "Withdraw". An additional comment can then be entered for further explanation. We obtained the Item History Report from PrimeroEdge and found questionable inventory adjustments and adjustment types, along with no supervisor review prior to the adjustments being completed. For example, only 22 of 50 (44%) transactions in the Item History Report labeled as "Add to Inventory" had additional comments explaining the adjustments. However, these comments were often incomplete and only stated "Inventory Adjustment". The remaining 28 transactions (56%) had no comments, leaving little information about the transaction. In addition, there were no policies and procedures regarding how items are adjusted.
- b. **Recommendation.** The Student Nutrition Director should ensure that Student Nutrition warehouse staff enter adequate explanations to explain inventory adjustments.

- c. **Management Comments.** Management stated, "Management agrees comments have not been added to inventory adjustments as they should have been. We have standard withdrawal reasons we must select when withdrawing an item from inventory. We did not realize those reasons did not print on the inventory history report. Moreover, additions to inventory do not have standard reason codes. We will document P&Ps based on PrimeroEdge best practices and comments will be required on all inventory withdrawals and additions."
- d. **Evaluation of Management Comments.** Management comments were responsive to the audit finding and recommendation.

5. **PrimeroEdge Inventory Records Not Accurate.**

- a. **Finding.** On-hand inventory balances in PrimeroEdge were not accurate. Our sample inventory revealed differences between our physical count and PrimeroEdge records. The following table contains examples of some of the discrepancies identified by our physical count.

Inventory Discrepancies as of August 2, 2022			
<b><u>Product</u></b>	<b><u>PrimeroEdge Record</u></b>	<b><u>Auditor Count</u></b>	<b><u>Discrepancies Over/(Short)</u></b>
Chicken Strips	450	441	(9)
Granulated Sugar	92	102	10
Rice Uncle Bens 25lbs Bag	327	340	13
Shredded Cheese	188	166	(22)
Source: Auditor physical inventory conducted on August 2, 2022.			

This was also the case when we reviewed the results of the annual inventory conducted by Student Nutrition warehouse staff the first week of June 2022. The annual inventory count was manually completed by Student Nutrition warehouse staff using handwritten notes on a note pad to track the inventory counts. These notes were messy and difficult to follow, resulting in staff sometimes incorrectly summing the product totals and then entering this data into PrimeroEdge. For example, flour packages were stored in multiple locations and tallied on their hand-written notes on different pages. When summing the flour packages from the hand-written notes to be recorded in PrimeroEdge, 43 flour packages from two aisles were missed. In addition, discrepancies between the physical count and PrimeroEdge records were not reconciled to identify the causes for the differences. As a result, the Physical Inventory Discrepancy report dated June 3, 2022, reported a net discrepancy of \$40,644 with 230 of 592 (39%) active and inactive items requiring correction. While the magnitude of this discrepancy is minor given a total inventory valuation of \$2.7 million, the number of items requiring correction may not be consistent with prudent inventory management practices. The following table contains examples of some of the discrepancies noted in the inventory totals calculated by Student Nutrition warehouse staff.

<b>ASD Calculation Errors</b> <b>From</b> <b>June 3, 2022, Inventory</b>			
<b><u>Product</u></b>	<b><u>ASD Inventory Entered Into PrimeroEdge from Note Pad</u></b>	<b><u>Auditor Recalculated Note Pad Total</u></b>	<b><u>Discrepancies Over/(Short)</u></b>
Canola Oil	299	285	14
Flour	286	329	(43)
Napkins	220	174	46
Powdered Sugar	66	26	40
Source: Auditor analysis of Student Nutrition warehouse staff June 3, 2022, inventory records.			

- b. **Recommendations.** The Student Nutrition Director should ensure PrimeroEdge inventory records are maintained accurately to reflect items in stock. In addition, after audit counts are completed the items with discrepancies should be reviewed and reconciled to ensure accuracy in reporting.
- c. **Management Comments.** Management stated, "Management agrees that our system inventory numbers are not always accurate. There is not an established guideline for food service industry inventory variance. However, a rule of thumb is <10%. ASD Student Nutrition's annual inventory variance was 1.5% for this audit. We will review the PrimeroEdge best practices for physical inventory and implement changes based on them."
- d. **Evaluation of Management Comments.** Management comments were responsive to the audit finding and recommendations.

6. **Negative Inventory Values on the Item Status Report.**

- a. **Finding.** The July 27, 2022, Student Nutrition Warehouse Item Status report showed 72 of 312 (23%) active items with negative balances, with 38 of these items having negative balances in the hundreds. As a result, inventory balances found in PrimeroEdge were nearly impossible to audit. Although the report showed negative balances, we found some products in the warehouse. For example, flour tortillas were reported having a negative balance of 548 units, yet we found 282 units of flour tortillas in the freezer. In some cases, negative values existed because a pick ticket was generated before the product was received. For example, if fresh fruit is in the warehouse on a Thursday a pick ticket will not be generated for delivery on a Monday because the fruit may spoil. Instead, a pick ticket is generated on a Thursday with the fruit delivered and sent to schools on Monday, resulting in a negative inventory value. In addition, Student Nutrition warehouse staff believed other items had negative inventory values because they were not properly adjusted in PrimeroEdge when used by

the Kitchen or returned by the Kitchen to the warehouse. The following table contains some examples of the negative balances reported in the PrimeroEdge system.

<b>Negative Inventory Balances</b> <b>as of</b> <b>July 27, 2022</b>	
<b><u>Product</u></b>	<b><u>PrimeroEdge Record</u></b> <b><u>Over/(Short)</u></b>
Carrots with Mixed Fruit	(755)
Dinner Rolls	(685)
Flour Tortillas	(548)
Tangerine Chicken and Oriental Rice	(762)

Source: Auditor analysis of July 27, 2022, Item Status Report.

While negative inventory can occur in PrimeroEdge due to timing of activities when receiving and withdrawing stock, if FIFO is used then negative balances should not occur. According to the PrimeroEdge user manual, “When FIFO is enabled, you cannot order more than the QOH [quantity on hand] (cannot be negative) when ordering from a district warehouse.”

- b. **Recommendations.** The Student Nutrition Director should ensure that those items having a negative balance are reviewed for appropriateness. In addition, the Student Nutrition Director should ensure that items used by the Kitchen are accurately tracked.
- c. **Management Comments.** Management stated, “Management agrees that there should not be negative balances when using FIFO. We will review the process of recording production and implementing what PrimeroEdge calls true FIFO.”

- d. **Evaluation of Management Comments.** Management comments were responsive to the audit finding and recommendations.

7. **Food “Best by Dates” Not Used.**

- a. **Finding.** “Best by Dates” were not used to manage the items stored in the warehouse. Since these dates were not entered into the PrimeroEdge inventory records, there was no reliable way for staff to locate the products that should be used first. It should be noted that “Best by Dates” does not mean that the product has expired. Student Nutrition warehouse staff sometimes wrote these “Best by Dates” on the food pallets when received, but this was not done consistently. Consequently, the oldest item were not always issued first and inventory past the “Best by Date” was found at the warehouse. For example, we found two items in the freezer section labeled with 2019 “Best by Dates.” Anchorage School District Food Safety Standard Operating Procedures 2022-2023 requires staff to “Label all food with receive, & Best by Date on end of boxes. . . .” Accurately documenting the “Best by Date” will help manage items stored in the warehouse and minimize spoilage and waste. A similar condition was reported in ASD Internal Audit Report 2018-03 and ASD Internal Audit Report 2015-05.
- b. **Recommendation.** To properly manage items stored in the warehouse and minimize waste, the Student Nutrition Director should actively use the “Best by Date” to ensure that the oldest items are used first and ensure these dates are recorded in PrimeroEdge.
- c. **Management Comments.** Management stated, “Management agrees that food best by and expiration dates are very important to insure food is located in a timely manner and used properly to limit waste. We revised the receiving procedure so we label all products with expiration, best by or received date. Moreover, we will investigate using Intelliscan and PrimeroEdge’s capabilities with expiration dates and bin locations.”

- d. **Evaluation of Management Comments.** Management comments were responsive to the audit finding and recommendation.

8. **Inadequate Warehouse Procedures.**

- a. **Finding.** The warehouse lacked standard operating procedures for PrimeroEdge users that outlined specific processes for completing warehouse tasks. After implementation of PrimeroEdge in 2021, the operating procedures were never updated and no PrimeroEdge manuals were being used by the Student Nutrition warehouse staff. In fact, staff could not provide us a PrimeroEdge user's manual, but we were able to locate a manual on-line. As a result, the full capabilities of PrimeroEdge were not used. For example, the inventory count and reconciliation process found in PrimeroEdge was not being followed along with the receiving inventory process. Specifically, the invoice reconciliation process to compare contract price with receipt prices to ensure there were no discrepancies was not being completed. In addition, when we inquired about the use of scanners and bar codes to track inventory, we were told that the software was not available when PrimeroEdge was implemented. However, the on-line user manual we located had a section regarding the use of scanner and bar codes. Many of the findings identified in this report could have been avoided with proper procedures in place.
- b. **Recommendation.** The Student Nutrition Director should develop and implement operating procedures for the warehouse covering the main functions of the warehouse operation and ensure that Student Nutrition warehouse staff review the PrimeroEdge user manual to better understand its capabilities.
- c. **Management Comments.** Management stated, "Management agrees not all warehouse procedures are written and followed across the workforce and department. Written procedures for all main warehouse functions will be completed by the end of the school year and all employees will be trained on them so that they may be implemented at the start of the new fiscal year."

- d. **Evaluation of Management Comments.** Management comments were responsive to the audit finding and recommendation.

9. **Physical Security at Warehouse Needs Improvement.**

- a. **Finding.** Although security had improved since our last audit, the food warehouse was still not adequately secured to prevent unauthorized access. Student Nutrition warehouse security has been improved since the last audit with the implementation of work badge access on most of the doors coming in and out of the warehouse and the installation of security cameras. However, food service staff and anyone else entering from the food preparation area had unrestricted warehouse access. In addition, the warehouse had no gate or other means to prevent unauthorized access and staff work locations did not allow for direct observation of the warehouse entrance. Finally, we observed a side door that was open during production hours and not always secured with a warehouse employee nearby but did have a camera to help monitor the area around the door. Without proper security, items stored in the warehouse are subject to theft, vandalism, and other unauthorized use. A similar condition was reported in ASD Internal Audit Report 2015-02 and ASD Internal Audit Report 2018-03.
- b. **Recommendation.** The Student Nutrition Director should strengthen physical security of the food warehouse by, as a minimum, securing all warehouse doors to prevent unauthorized entry and moving work stations to provide a visible presence at the entrance.
- c. **Management Comments.** Management stated, "Management agrees we need to strengthen the physical security of the entire building and look to minimize unauthorized entry. We will ensure all doors are properly secured. Due to structure layout we will review access to the warehouse from the kitchen. Finally, a mirror will be installed to give the Logistics Manager some view of the hallway."

- d. **Evaluation of Management Comments.** Management comments were responsive to the audit finding and recommendation.

**Discussion With Responsible Officials.** The results of this audit were discussed with appropriate Municipal officials on January 25, 2023.

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