Montgomery County, Maryland
Office of the County Executive
Office of Internal Audit

Internal Control Review of Warehouse Inventory Management
Alcohol Beverage Services

November 18, 2019
MCIA conducted an internal control review of Alcohol Beverage Services' (ABS; previously named the Department of Liquor Control) warehouse inventory management operations. ABS was established by Montgomery County to regulate the distribution and sale of alcoholic beverages to consumers County-wide. As of August 23, 2019, ABS services customers at 25 retail locations and 1,074 licensees across the County. Total sales for fiscal year 2018 totaled $294.86 million dollars.

This internal control review (review) was included in the 2016 County-wide risk assessment, and is the result of findings and recommended corrective actions identified through prior reviews conducted by MCIA and the Inspector General (IG). The focus of the review was to evaluate the current internal control environment of the warehouse, and ensure that the recommended enhancements to controls and processes have been implemented and are working as intended. The review was conducted by the accounting firm SC&H Group, Inc., under contract with MCIA.

MCIA is making 12 recommendations to strengthen ABS’ internal controls over the management of inventory.

Internal Control Review of Alcohol Beverage Services’ Warehouse Inventory Management

What MCIA Found
ABS implemented recommendations to improve warehouse inventory management operations. Multiple findings from prior reviews have been remediated effectively.

This review identified additional opportunities to mitigate risks. The risks can be addressed by enhancing or implementing internal controls within the inventory management function.

We identified 12 internal control related findings within the ABS warehouse inventory management function. These findings relate to risk surrounding:
1. Accurately reflecting the quantities and locations of all items in the inventory records.
2. Ensuring that periodic inventory counts performed are independent and blind, and that variances are investigated.
3. Safeguarding all inventory items against misappropriation.
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Objectives

This report summarizes the internal control review (review) performed by SC&H Group, Inc. (SC&H), under contract with the Montgomery County (County) Office of Internal Audit (MCIA), of Alcohol Beverage Services’ (ABS) warehouse inventory management operations. The review focused on warehouse and inventory/supply management operations including enhancements to controls and processes that have been recommended in prior reviews. The objectives were to:

1. Evaluate the design and effectiveness of ABS warehouse inventory management internal controls.
2. Validate that appropriate control and process improvements have been implemented and appropriately address risks within ABS warehouse operations.

Background

Montgomery County’s Department of Liquor Control (DLC) was created under state law in 1951 and has responsibility for the distribution of all beverage alcohol within the County. As a result, all beverage alcohol sold in the County passes through the DLC warehouse prior to distribution. The DLC was re-named to Alcohol Beverage Services (ABS), effective July 1, 2019. While Maryland at large is considered a license state, the County operates as a control jurisdiction within the state. All County alcohol laws are state governed and are not determined directly by the County or ABS.

As of August 23, 2019, ABS manages and operates 25\(^1\) retail store locations and supplies 1,074\(^2\) licensees with alcoholic beverages stored within the ABS Warehouse. In fiscal year 2018, total County-wide sales totaled $294.86\(^3\) million dollars. ABS employs approximately 427 full-time employees across retail stores, administrative services, warehouse operations, delivery operations, licensure regulation and education, and the Office of the Director.

The warehouse stores approximately 5,800 unique items that are categorized as beer, wine/liquor, or kegs. In addition to the regularly-stocked items, ABS also special orders products for clients, as requested.

<table>
<thead>
<tr>
<th>Product Type</th>
<th>Number of Unique Inventory Items</th>
<th>Total Inventory Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beer</td>
<td>986</td>
<td>$5,226,434</td>
</tr>
<tr>
<td>Wine/Liquor</td>
<td>4,525</td>
<td>18,370,740</td>
</tr>
<tr>
<td>Kegs</td>
<td>295</td>
<td>383,178</td>
</tr>
<tr>
<td>TOTAL</td>
<td>5,806</td>
<td>$23,980,352</td>
</tr>
</tbody>
</table>

\(^1\) Refer to the ABS store listing at: https://montgomerycountymd.gov/ABS/stores/
\(^2\) Refer to the licensee listing at: https://www.montgomerycountymd.gov/ABS/licensure/licensee-listing/
\(^3\) Total sales and FTE headcount at: https://stat.montgomerycountymd.gov/stories/s/Department-of-Alcohol-Beverage-Services-ABS-/xmp2-7nsf
\(^4\) This information is based on the results of the annual full physical inventory count performed on June 28 and 29, 2019.
Prior Warehouse Operations Reviews

MCIA\(^5\) conducted and the Inspector General (IG)\(^6\) conducted two prior reviews in 2014 and 2015, respectively. The reviews focused on warehouse and inventory/supply management operations. ABS worked with other County departments, such as the Department of Finance (Finance), to develop a corrective action plan to address improvements in processes and controls at the warehouse, including specific controls to improve financial and inventory management.

ABS Warehouse Operations

ABS conducts warehouse operations at one physical location, 201 Edison Park Drive, Gaithersburg, MD 20878. The warehouse floor segregates beer from wine/liquor, has a refrigerated room for storing kegs, and a separate room for storing broken/damaged items. Warehouse inventory is routed to one of four loading bay doors over a series of rolling conveyor lines.

Warehouse operations include receiving and securing inventory items, processing orders, and loading items for deliveries to retail stores and licensees. The process areas are further explained below:

- **Inventory Receiving:** ABS receives inventory shipments from producers and distributors each day, Monday through Friday. Delivery drivers are directed to one of the warehouse’s four loading bays based on a set delivery schedule that is coordinated between the shippers (the manufacturers or third party delivery companies) and warehouse management.

  Assigned Warehouse Operators (Operators) offload and verify that the items ordered were received. Missing items or incomplete/partial shipments are noted on the receiving documents (e.g. bill of lading or manifest). Operators receive the items against the purchase order in the inventory module of Oracle (Oracle; the third-party ERP software used by ABS for inventory management). The inventory record with the new item quantity is updated as items are received in Oracle. Operators then move the items into the assigned inventory locations.

- **Order Fulfillment:** ABS fulfills and delivers customer (both retail stores and licensees) orders on a daily basis. Order fulfillment activities include:
  - **Routing:** Routing is the process of efficiently assigning all deliveries to available trucks. Retail stores and licensees have until 11:30AM to place orders within Oracle for next day delivery. Once all orders have been received, delivery routes are generated from Oracle based on available trucks and drivers, the number of stops, and in consideration of optimizing each delivery route. Routing is separated by item type (kegs, beer, or wine/liquor) as shipments of each item

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type are performed separately and delivered to retail and licensee locations on alternating days.

- **Inventory Picking:** Picking is the process of fulfilling customer orders by selecting the ordered items from the on-hand stock for placement into delivery trucks. When routing is completed, Oracle generates inventory pick lists that identify the items to be loaded onto each truck for delivery, and the order in which each item is to be picked. The pick lists are organized so that the items to be delivered last are closest to the front of the truck, and the items to be delivered first are located at the rear of the truck.

  The pick lists are loaded into voice-over pick headsets worn by Operators, known as Pickers, along the automated conveyor system (referred to as the “track”). The headset is interfaced to Oracle and adjusts the on-hand inventory records each time an item is picked. Items are automatically called through the headset (providing the product name, location, and quantity). Pickers pull items from the designated picking location and place them on the track to be loaded on the truck. Any items that Operators can’t locate from locations along the track are skipped.

  After the completion of a pick list, the Warehouse Supervisor generates a list, known as the skip report from Oracle, detailing all items skipped during picking. The skip report is provided to an Operator who attempts to locate each item at other locations within the warehouse. If located, the Operator places the item on the track, manually notes on the skip report that the item was picked, and the item is loaded onto the delivery truck. If the item is not located, or there is not a sufficient quantity on-hand, the Operator notes the item was not picked and the final invoice(s) are updated once picking is completed.

- **Inventory Loading:** Loading is the placement of the picked items into the delivery trucks for customer delivery. Picked inventory items are placed on the track and moved past an Operator, known as the Checker, prior to being loaded onto the designated delivery truck. Checkers confirm the appropriate item was picked as items move past them on the track using a hard copy of the pick list generated from Oracle. Correct items/quantities are manually noted on the pick list, as well as any items that were skipped during picking. Incorrect items are removed from the track as they pass the Checker to prevent improper delivery. Once each truck is loaded, the truck cargo doors are secured with seals and staged in the warehouse parking lot until delivery.

- **Stock Replenishment:** Some items are stored in multiple locations within the warehouse – one location along the track for picking, and other locations where additional quantities are stored until they’re needed for order fulfillment. Stock replenishment is the process of moving inventory from other locations within the warehouse to the locations along the rolling conveyor lines from which the items are picked for placement onto the delivery trucks. Throughout the day, Operators continuously relocate items from stock locations a) to other stock locations to maximize available space, and b) to replenish the track where smaller quantities of items are stored to be picked for delivery. Operators identify picking locations that have low inventory levels and replenish the items from the stock locations
where larger quantities are stored, physically move the items between locations, and update inventory records to reflect the item movement.

- **Returns and Breakage:** In addition to sending items out for delivery to retail stores and licensees, the warehouse accepts inventory items back that were delivered incorrectly and collects items that have been damaged or broken in the warehouse or in route to the customer.
  - **Inventory Returns:** Returns are items that were placed on a truck in error and were not included on customer orders. On a daily basis, drivers return to the warehouse and deposit returned inventory items that were not accepted by a retail store or licensee at the time of delivery. Returns are accumulated and returned to stock locations.
  - **Inventory Breakage:** Breakage refers collectively to items that were damaged at some point prior to being delivered to the customer – either while stored in the warehouse, or on a truck in route to delivery. All damaged/broken inventory items are stored in a designated “breakage room” within the Warehouse. Items moved to the breakage room are removed from inventory. Items that can be salvaged are repackaged and scanned back to an inventory location and items that cannot be salvaged are returned to suppliers for a credit.

- **Dunnage Items:** Dunnage is a term that describes miscellaneous items used in packaging and securing cargo, primarily during transportation. The ABS warehouse retains the following dunnage items: empty kegs, pallets (wooden and plastic), and insulated tarps used for item temperature control during shipping. Dunnage items are stored inside the warehouse on shelves, and along the back wall on the exterior of the warehouse building within the gated area.
  - **Kegs and pallets:** Kegs and pallets are tracked in Oracle by quantity. There are unique item descriptions, but they are not tracked by specific location within the warehouse.
  - **Insulated tarps:** Insulated tarps are stored in the warehouse, but they are not tracked in Oracle.

**Periodic Inventory Counts**

The ABS warehouse conducts periodic inventory counts to evaluate and update inventory records to accurately reflect each item’s quantity in the warehouse that is available for order fulfillment. Each item stored in the ABS warehouse is counted a minimum of two times per year. There are two types of periodic counts performed:

- **Daily Cycle Counts:** A daily cycle count is a process where a limited number of inventory items are selected to be counted and compared to on-hand inventory records. Oracle includes a cycle count function that includes parameters, based on item quantity and value, which is configured to include each item a pre-determined number of times throughout the year. Count results that differ from the inventory records and cannot be resolved through subsequent investigation result in adjustments to ensure the inventory records continue to reflect the number of each item available for order fulfillment.

  Each weekday, the Assistant Warehouse Supervisor (Assistant Supervisor) performs a cycle count of inventory items stored within the ABS Warehouse. The Assistant
Supervisor accesses Oracle’s cycle count function and the system generates the daily cycle count sheets for beer and wine/liquor. Oracle generates count sheets detailing the sample of items within the Warehouse that are to be counted, including the item description, location, and current on-hand quantity, per the inventory record. Utilizing the count sheets, the Assistant Supervisor locates each item and counts the item quantity. The count is recorded on the count sheet. If the number of items counted does not agree to the on-hand inventory record for that item and location, the Assistant Supervisor attempts to locate the item at another location within the warehouse.

Following, the Assistant Supervisor enters the daily cycle count results into Oracle. Variances between the counted quantities and the on-hand inventory record generate the cycle count adjustments. The Inventory Manager then reviews and approves cycle count adjustments prior to processing them. Once all adjustments are approved, the inventory records are updated within Oracle to reflect the new quantities. The following chart summarizes the total inventory adjustments (positive, negative, and net) by item type in FY 2019:

<table>
<thead>
<tr>
<th>Product Type</th>
<th># Positive Adjustments</th>
<th># Negative Adjustments</th>
<th>Total # of Adjustments</th>
<th>Net Adjustment Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beer</td>
<td>1,599</td>
<td>1,885</td>
<td>3,484</td>
<td>-$33,110</td>
</tr>
<tr>
<td>Wine/Liquor</td>
<td>1,218</td>
<td>2,710</td>
<td>3,928</td>
<td>-304,113</td>
</tr>
<tr>
<td>Kegs</td>
<td>33</td>
<td>63</td>
<td>96</td>
<td>-17,271</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>2,850</strong></td>
<td><strong>4,658</strong></td>
<td><strong>7,508</strong></td>
<td><strong>-$354,494</strong></td>
</tr>
</tbody>
</table>

*(NOTE: An “adjustment” may include multiple units of an item; so, there is not a 1-to-1 relationship between the number of adjustments and the number of units updated by each adjustment.)*

- Annual Full Physical Inventory: Annually, ABS conducts a full physical count of all inventory located in the warehouse. Oracle has an inventory function that includes all items and locations that are recorded in the inventory records in the population to be counted. The inventory is “frozen” (no receiving or picking) prior to and for the duration of the inventory process.

Operators participate in the physical inventory as Counters and are separated into count teams with designated count zones. Each item is counted and the results are entered into handheld scanners that update Oracle. Once all items have been counted, Oracle produces an inventory report that identifies all initial variances. Management reviews the results of the count and determines a variance threshold for recount based on quantity and/or value.

Depending on the number of variances, multiple recounts may be required. When the final count is completed, the remaining variances create inventory adjustments to each impacted inventory record. The adjustments are approved in Oracle by the Chief of Administrative Services and the inventory records are updated. Once the inventory process is complete, the inventory is un-frozen in Oracle and warehouse activities can resume. The following chart summarizes the inventory adjustments (positive, negative, and net) from the FY 2019 full physical inventory count, for each item type:
### Total Annual Physical Count Adjustments - FY2019

<table>
<thead>
<tr>
<th>Product Type</th>
<th># Positive Adjustments</th>
<th># Negative Adjustments</th>
<th>Total # of Adjustments</th>
<th>Net Adjustment Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beer</td>
<td>398</td>
<td>629</td>
<td>1,027</td>
<td>-$81,791</td>
</tr>
<tr>
<td>Wine/Liquor</td>
<td>1,460</td>
<td>2,069</td>
<td>3,529</td>
<td>-152,849</td>
</tr>
<tr>
<td>Kegs</td>
<td>73</td>
<td>114</td>
<td>187</td>
<td>-3,315</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>1,931</strong></td>
<td><strong>2,812</strong></td>
<td><strong>4,743</strong></td>
<td><strong>-$237,955</strong></td>
</tr>
</tbody>
</table>

*(NOTE: An “adjustment” may include multiple units of an item; so, there is not a 1-to-1 relationship between the number of adjustments and the number of units updated by each adjustment.)*

### ABS Warehouse Inventory Accuracy

SC&H assessed the reasonableness of the total inventory adjustments over the past year by taking the total net inventory adjustment values from all daily cycle counts, added to the net inventory adjustments values resulting from the annual full physical inventory. The total net inventory adjustments were calculated as a percentage of the total warehouse inventory value for beer, wine/liquor, and kegs and provided the following information:

<table>
<thead>
<tr>
<th>Product Type</th>
<th>Total Inventory Value</th>
<th>Total Net Inventory Adjustments</th>
<th>Inventory Accuracy Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beer</td>
<td>$5,226,434</td>
<td>-$114,901</td>
<td>97.8%</td>
</tr>
<tr>
<td>Wine/Liquor</td>
<td>18,370,740</td>
<td>-456,962</td>
<td>97.5%</td>
</tr>
<tr>
<td>Kegs</td>
<td>383,178</td>
<td>-20,586</td>
<td>94.6%</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>$23,980,352</strong></td>
<td><strong>-$592,449</strong></td>
<td><strong>97.5%</strong></td>
</tr>
</tbody>
</table>

The value of inventory adjustments as a percentage of the warehouse inventory value represents the accuracy of the warehouse inventory. SC&H researched industry standards for warehouse inventory accuracy and found that there was not a single agreed-upon threshold. However, research indicated that a warehouse inventory accuracy of 97 - 98% is generally found to be acceptable. We found that overall the inventory accuracy of the ABS warehouse fell within the acceptable range. Individually, each product group fell within the acceptable range, with the exception of kegs, which was lower at 94.6%, but with a total value that represents only 1.6% of the total inventory value.

### ABS Warehouse Security

Access to the warehouse and to the inventory records is limited to ABS and other County personnel with a business need.

- **Inventory Management System Security:** ABS controls access to Oracle inventory records by granting system users access specific permissions to inventory-related functions based on each user’s roles and responsibilities. The ABS IT Manager is responsible for coordinating user system access with the Department of Technology Solutions (DTS) Enterprise Resource Planning (ERP) group.

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7 The formula used to calculate warehouse inventory accuracy is \(1 - (\text{value of variance/value of total inventory}) \times 100\) percent.
• Warehouse Physical Security: ABS restricts access to the warehouse through the use of Access ID cards and keys.
  o Access to the external gate and most warehouse doors are controlled by Access ID cards. The ABS IT Manager coordinates Access ID cards with the Montgomery County Police Department’s Security Services Division.
  o Access to approximately five doors within the office area of the warehouse is controlled through physical keys. Keys are issued by ABS management. Prior to July 1, 2019 the Deputy Director issued keys. Following July 1, 2019 keys are assigned by the Chief of Administrative Services.

Scope and Methodology

The review was conducted from June 2019 to August 2019. The review focused on current warehouse inventory management processes and internal controls. The review also considered whether prior recommendations were implemented and, if so, whether the enhancements were operating as intended to ensure effective inventory management.

The review scope did not include the activities of ABS Buyers or other non-warehouse personnel, such as product ordering and cashiering operations. The review scope also did not include retail store operations, or activities performed by other departments, such as the Department of Finance (Finance), that are related to ABS warehouse operations. Documentation from FY 2019 was utilized for testing purposes for the review.

In order to achieve the objectives, SC&H performed the following:

Data Collection

SC&H obtained and reviewed policy and procedure documents (also known as standard operating procedures, or SOPs) from ABS management at the outset of the review. Other related documents such as CountyStat performance metrics and organizational information were obtained in addition to the results of two prior reviews conducted by MCIA and the IG. ABS provided the status of the implementation of the enhancements included in the corrective action plan from the prior reviews. The information obtained was taken into consideration when developing test procedures.

Interviews and walkthroughs were conducted with ABS staff involved in the following processes to observe and document the processes and internal controls, and identify the risks associated with each of the following:
1. Inventory receiving
2. Inventory picking
3. Inventory loading
4. Stock replenishment
5. Daily cycle counts
6. Annual full physical inventory count
7. Physical Security
8. Breakage
9. Returns
Utilizing the information obtained from the process walkthroughs, SC&H developed a risk and control matrix (RCM) that documented risks, internal controls, and gaps identified within the various warehouse operation process.

Following the RCM’s development, a test plan was created to test the operational effectiveness of internal controls.

**Inventory Management Internal Controls Testing**

All key controls were tested to assess the operating effectiveness of the control activity. SC&H prepared a document request list for all information needed to satisfy the testing steps developed in the test plan, including populations needed to select samples for which additional information was requested. Additional walkthroughs were performed with various Warehouse staff to obtain a more detailed understanding of selected process areas and evaluate the effectiveness of the related controls. The results of all testing performed and walkthroughs conducted were compiled and used in the risk analysis.

**Risk Analysis**

Following the completion of the testing procedures, SC&H confirmed the results with ABS management. Based on the outcomes of testing performed, SC&H updated the RCM to reflect the design and operating effectiveness of existing controls (inclusive of control enhancements that were the result of the corrective action plan), identify the control gaps or weaknesses that remain, and quantify the level of residual risk that remains.

**Data Analytics**

In addition to the detailed testing performed, SC&H conducted data analytical procedures over multiple populations to identify trends and establish metrics related to the inventory management function. The analytics performed included:

- Identifying instances in which adjustments were entered and approved by the same user to demonstrate a segregation of duties issue.
- Identifying items with the largest (positive and negative) variances, for both beer and wine/liquor (using both quantity and value), which could indicate issues such as misappropriation of assets or receiving errors.
- Recalculating the inventory accuracy of both beer and wine/liquor including cycle count adjustments and full physical inventory adjustments in the calculation.

**Findings and Recommendations**

The following 12 opportunities were identified to further strengthen existing ABS warehouse inventory management controls and processes. Findings are categorized by management function.

**1. Overall**

**Finding 1.1**

Policies and procedures have not been sufficiently developed and documented for each significant ABS Warehouse process area.
ABS lacks a comprehensive set of documented policy and procedures for warehouse inventory management processes.

**Inadequately Defined Documents**
The following processes do have documented policy and procedures, but the documentation does not adequately define the steps and controls within each process. For example, processes are summarized into a few bullet points and do not include elements that would be expected in effective documentation.

1. Stock Receiving (incorporates Beer stock as well)
2. Receiving for Specials
3. Receiving Over the Road
4. Stock Replenishment
5. Shipping Liquor/Wine (includes Routing & Picking, which could be separated out into their own SOPs)
6. Shipping Beer (includes Routing & Picking, which could be separated out into their own SOPs)

**No Documentation**
The following do not have policy and procedure documents:

1. Returns from stores/licensees
2. Returns to suppliers
3. Breakage
4. Dunnage
5. Cycle Counts
6. Full Physical Counts
7. Managing ABS Access to Oracle Inventory Records
8. Managing ABS Access ID Cards

**Risks**
The lack of a comprehensive set of detailed, documented policies and procedures could result in inconsistent application of control activities designed to protect ABS inventory and ensure the accuracy and completeness of inventory records.

**Recommendation 1.1a**
Update policy and procedure documentation related to warehouse inventory management such that the documents are written at a level that personnel who perform the steps should be able to rely on the documents to understand the expected steps to be performed. Where a policy or procedure concerns cycle counts or other verification methods, the document should include prescribed thresholds (such as for variance investigations, reviews, approval, and timing).

**Recommendation 1.1b**
Implement a process to periodically review, approve, update, and communicate policy and procedure documentation to remain current and so warehouse personnel can follow the most up-to-date policies (e.g. annually or when significant events that impact processes occur). Policy and procedure documents and updates should be communicated to warehouse personnel timely.

**Recommendation 1.1c**
Implement a process that includes periodic and documented observations of warehouse inventory management processes being performed by assigned personnel to determine
compliance with the processes and the need for additional training to ensure warehouse personnel follow established policies and procedures as intended.

**Finding 1.2**
The current population of warehouse inventory locations does not accurately account for all inventory physically located in or around the warehouse.

Specifically, the following are not currently tracked in the inventory records, despite being physically present on-site:

1. **Truck returns:** Truck return inventory primarily consists of items that were picked and loaded onto a delivery truck, but were not updated in the inventory records. As such, items are reflected in the inventory records in their previous location despite being removed. Undelivered inventory is returned to the warehouse and is collected in an area under the conveyor belts until personnel have availability to return the items to their inventory locations. This could be multiple days, during which time the inventory records are inaccurate.

2. **Breakage:** There is not an inventory location to accurately track items moved into, or out of, breakage. Damaged inventory is removed from the inventory record and physically moved to the breakage room within the warehouse. If the items are able to be repackaged, or sold individually, they are put back into the inventory records. During the time in which items are stored in the breakage room, the inventory records are inaccurate.

3. **Dunnage:** Dunnage items stored in/around the warehouse are not accurately tracked and monitored. This includes empty kegs, pallets, and insulated blankets. While there are inventory locations set up to track some dunnage items, a) the dunnage items that are tracked within the inventory system are not accurately tracked and monitored, and b) not all dunnage items are tracked in the inventory system. ABS stores insulated tarps within the warehouse, but does not track the items in the inventory records.

In addition to creating a discrepancy between the number of items physically located in/around the warehouse and what’s reflected in the inventory records, items in locations that are not tracked in the inventory system cannot be selected for inclusion in either the daily cycle counts, or the annual full physical count.

**Risks**
Delivery returns that are generally still in the inventory system, but not physically located in the recorded location, could result in inaccurate inventory records.

Items such as breakage and dunnage items are not accurately and consistently reflected in inventory. As a result the inventory records are inaccurate and inventory theft could go detected.

**Recommendation 1.2**
Create inventory locations for all current/potential storage locations in and around the warehouse. Any time that items are moved into/within/around the warehouse, the items should be able to be scanned into a location within the inventory records so that the physical location of the items always matches the location as reflected in the inventory records.
2. Receiving

**Finding 2.1**

*Delivery manifests are not properly signed once all items have been removed from the truck, on a consistent basis.*

SC&H reviewed the delivery manifests for a sample of inventory shipments (both over the road deliveries and deliveries from distributors/producers) and found that delivery drivers and/or receiving warehouse personnel do not sign the delivery manifests on a consistent basis.

**Risks**

Inventory items/quantities could be incorrectly received at the ABS Warehouse, resulting in inaccurate inventory counts and misappropriation of assets.

**Recommendation 2.1**

All delivery manifests should be signed by both the delivery driver and the receiving warehouse personnel (for deliveries from distributors/producers) or the receiving warehouse personnel (over the road shipments) to evidence the inventory items and quantities that were received. ABS should determine an appropriate retention period (e.g. based on internal/external reporting requirements, County requirements, audit requirements, etc.) and retain signed delivery manifests to evidence the accurate receipt of warehouse inventory.

3. Stock Replenishment

**Finding 3.1**

*Operators do not consistently utilize the warehouse inventory scanners to transfer items between stock locations within the warehouse.*

Items are moved from stock locations to pick locations without updating inventory records. This has resulted in inaccurate inventory records reflected within Oracle.

The following was identified during the review:

1. Warehouse personnel relocate inventory without utilizing the handheld scanners to update the inventory locations.
2. The Counter had to follow up and investigate inventory locations to resolve variances in which inventory was moved to a different location, resulting in inaccurate inventory counts.
3. A review of the cycle count adjustments for the previous year identified off-setting variances that indicate the movement of inventory between warehouse locations without updating the locations, resulting in inaccurate inventory locations.

**Risks**

Inventory items are not in the correct location within the warehouse, resulting in inaccurate inventory records.

**Recommendation 3.1**

Update inventory records on a consistent basis to reflect each instance in which inventory is moved between warehouse locations. Warehouse personnel should be held accountable for unrecorded inventory movements that result in inventory record discrepancies.
4. Order Fulfillment

**Finding 4.1**
There is no evidence that beer inventory items picked are reviewed by a Checker to ensure picking accuracy.

Checkers initial hard copy pick lists to evidence their review of picked items. ABS management has not formalized retention periods for documentation including pick lists, but indicated that hard copy pick lists are retained for approximately one month. SC&H selected a sample of beer and liquor/wine pick lists to review for evidence that the Checkers were reviewing and signing off on the pick lists. The liquor/wine pick lists were reviewed without exception. Review of a sample of beer pick lists was unable to be completed to ensure the process operates as intended. We found that beer pick lists are only retained for one week, so the pick lists selected for testing were not available for review.

**Risks**
Incorrect inventory items could be picked to fulfill ABS liquor store, licensee, or special event customer orders, resulting in misappropriation of assets.

**Recommendation 4.1**
ABS should determine and formalize through policy an appropriate retention period (e.g. based on internal/external reporting requirements, County requirements, audit requirements, etc.) and retain all signed pick lists to evidence the review of picked inventory items.

5. Cycle Counts

**Finding 5.1**
Cycle counts are not true independent, blind counts.

The cycle count sheets printed out by the Assistant Warehouse Supervisor have the current inventory record quantities for each product/location. Additionally, the Assistant Warehouse Supervisor has the ability to select and/or de-select items to be counted in the cycle count.

**Risks**
1. Inventory records not monitored on a continuous basis could be inaccurate.
2. An ineffective cycle count process could allow inventory theft to go undetected.
3. Cycle counts that are not blind could allow for potential manipulation of count results.

**Recommendation 5.1a**
Count sheets used to conduct cycle counts should not include the current inventory record item quantities for each item selected for counting.

**Recommendation 5.1b**
Adjust cycle count settings to prevent modifying the items selected for counting. If Oracle doesn’t allow this adjustment, modify the cycle count process so the person counting the items isn’t also responsible for selecting the items to be counted.

**Finding 5.2**
Evidence that cycle count variances are investigated prior to the adjustment being approved in Oracle is not documented and retained on a consistent basis.

Evidence of variance investigations was not provided for 9 of 25 cycle count adjustments selected for testing.
Risks
The lack of documented thresholds for investigating variances prior to adjustment approval could result in inaccurate inventory records, and could also allow inventory theft to go undetected.

Recommendation 5.2
Document the variance investigations to support the appropriateness of approving inventory adjustments and awareness of potential issues. ABS should determine an appropriate retention period (e.g. based on internal/external reporting requirements, County requirements, audit requirements, etc.) and retain documentation to evidence that variances were investigated prior to approving inventory adjustments.

Finding 5.3
The person conducting the cycle count and entering the count results also has the ability to approve the inventory adjustments in Oracle.
2,869 instances were noted where inventory adjustments were entered and approved by the same person, resulting in a segregation of duties issue.

Risks
Insufficient segregation of inventory adjustment entry and approval duties could result in inaccurate inventory records, and allow inventory theft to go undetected.

Recommendation 5.3
Update user access to the inventory system to prevent users from having the ability to both enter and approve adjustments to inventory records.

6. Quarantine
Finding 6.1
Inventory moved into a Quarantine inventory location is not accurately tracked/monitored.

The following was identified during the review:
1. Per the final annual full physical count analysis for items in quarantine locations, 439 of 820 items could not be located and were adjusted out of the inventory records. Further, all items recorded in one specific quarantine location (#2) were either physically located somewhere else in the warehouse, or they were no longer part of warehouse inventory. For this location, 17 of 17 items could not be located and were adjusted out of the inventory records.
2. Inventory items recorded in one specific quarantine location (#4) are physically moved to a location outside at the loading docks. This inventory is not organized to allow for inventory monitoring, and it is located alongside additional unorganized "to be destroyed" inventory.

Risks
1. Quarantined inventory is inaccurately and inconsistently reflected in inventory records.
2. An ineffective Quarantine process could allow inventory theft to go detected.

Recommendation 6.1
Accurately track all inventory items moved into quarantine inventory locations in the inventory records. Organize the items moved to quarantine locations to allow for effective monitoring.
As items are moved out of the quarantine location (e.g. to be returned to vendors), consistently update the inventory records to reflect the movement.

7. Full Physical Inventory

Finding 7.1
The full physical inventory count is not a true independent, blind count.

During the physical inventory count, the following was identified:
1. Books printed from Oracle designed to provide item numbers for Counters were placed in various locations in the warehouse. These books showed quantities on hand for each item number listed.
2. A workstation was left unlocked with access to the quantities on hand for each item number and location.

Risks
1. An ineffective physical count process could allow inventory theft to go undetected.
2. Inventory counts that are not blind could allow for potential manipulation of count results.

Recommendation 7.1
Prohibit access to information that provides the current inventory record for items included in the inventory count for warehouse personnel performing the count.

8. Physical Security

Finding 8.1
There is no documentation evidencing who has been issued master keys, including the keyholders acknowledgement of their receipt of the master key.

Five ABS warehouse personnel have been issued master keys that allow access to all warehouse doors that are secured with key locks. ABS management does not have documentation evidencing the issuance of the master keys to any of the keyholders, or a log that documents each of the individuals that have been issued master keys.

Risks
Lack of control over master key distribution could result in unauthorized access to secure warehouse locations.

Recommendation 8.1a
Develop a form in which each keyholder acknowledges receipt of their master key. The keyholder should sign the form as evidence that they have been issue a master key. The issuer should sign the form evidencing that they issued a master key to the key holder.

Recommendation 8.1b
Maintain a log evidencing each individual who has been issued a master key. Update the log each time a master key is issued, or collected, to ensure the log remains current.

Finding 8.2
The population of ABS Warehouse Access ID cards, and the assigned accesses, are not reviewed on a documented, periodic basis.
There is not a process in place to review and update the population of Access ID cardholders with access to warehouse facilities on a defined, periodic basis. SC&H provided ABS management with a list of Access ID cardholders with access to the warehouse facilities that do not appear to be current ABS employees. We also provided a listing of all contractors with access to the warehouse facilities.

Risks
Unauthorized individuals could access the warehouse resulting in misappropriation of inventory.

Recommendation 8.2
Formalize and document a process to review a population of Access ID cards with access to ABS warehouse facilities. Ensure that the Access ID cards for all individuals (current employees, separated employees, and contractors) who no longer have a business need to access the warehouse are deactivated or modified to appropriately restrict access.

Comments and MCIA Evaluation
We provided ABS with a draft of this report for review and comment. ABS responded with comments on November 15, 2019. the response has been incorporated in the report at Appendix A. ABS concurred with the findings identified in the report, indicating that the department intends to implement to the fullest extent possible the recommendations contained in the report. No changes have been made in the report based on the response.
Appendix A – ABS Response

MEMORANDUM

November 15, 2019

TO: Fariba Kassiri, Deputy Chief Administrative Officer
   Office of the County Executive

FROM: Robert M. Dorfman, Director
       Alcohol Beverage Services


Alcohol Beverage Services (ABS) concurs with all twelve of the opportunities to further strengthen our existing warehouse management controls and processes identified in the Internal Control Review of Warehouse Inventory Management report issued by the Office of Internal Audit. We also agree to implement, to the fullest extent possible, the associated recommendations listed within.

ABS would like to take this opportunity to thank both the Internal Audit Manager, Bill Broglie, and the Audit team at SC&H for their professional, collaborative and positive approach to this review. Both took the time to not only understand where our warehouse management controls are currently, but also to understand how far these controls had come since the prior two reviews performed back in 2014 and 2015 respectively. We will use this internal control review report as a guide to take our controls to the next level.

cc: Bill Broglie, Internal Audit Manager, Office of the County Executive