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Standard Practice for
~~Physical Inventory of Durable, Moveable Property~~Inventory Verification: Electronic and Physical Inventory of Assets[1]

1. Scope

~~1.1This practice covers the physical inventory of durable, moveable property. Physical inventory is a vital part of a property control system.~~

1.1 This practice addresses inventory verification which includes either physically or electronically confirming the existence, location, and quantity of assets.

1.2 Inventory verification is a key element in the asset management process.

1.3 The appropriate level to track assets is best expressed in Practices E2499 and E2608. Different types of assets may be managed or tracked at different levels of control, as noted in Practice E2608. The location specificity required for an inventory verification should match the location specificity required by the entity's asset management procedures or other controlling command media.

1.4 Inventory verification requires proper planning and execution. Depending on the type and scope, the inventory verification can involve significant dedication of resources. Entities should ensure that the value earned from an inventory verification is equal to or greater than the costs of the dedication of resources.

2. ~~Significance and Use~~ Referenced Documents

~~2.1 *Physical Inventory*—The primary product of a physical inventory is a report identifying, at a minimum, which items were located and which were not. The number and value of unlocated items constitute an organization's loss experience, which is critical for assessing the organization's property control risk and success. Unlocated items that are capitalized on an organization's financial records are generally written off at the close of the inventory (and therefore physical inventories are important to ensuring that public financial statements are accurate). Physical inventories have several byproducts as well. During the inventory, record deficiencies, such as incorrect locations or unrecorded property items are identified; these records are corrected as part of the process. Finally, physical inventory serves as a deterrent to loss, theft, damage, and misuse as those responsible for property perceive that they will be held accountable for it and be required to produce it on a periodic basis. In summary, physical inventories are conducted to accomplish one or more of the following:~~

~~2.1.1Assess the accuracy of property records,~~
~~2.1.2Update property records,~~
~~2.1.3Assess property loss experience,~~
~~2.1.4Provide the status of capital items for financial reporting purposes, and~~
~~2.1.5Deter misuse, loss, damage, and theft of property.~~

~~Physical Inventory~~ ASTM Standards:

E2131 Practice for Addressing and Reporting Loss, Damage, or Destruction of Tangible Property
E2135 Terminology for Property and Asset Management
E2499 Practice for Classification of Asset Physical Location Information
E2604 Practice for Data Characteristics of Equipment Records
E2608 Practice for Equipment Control Matrix (ECM)
E2674 Practice for Assessment of Impact of Mobile Data Storage Device (MDSD) Loss

3. Terminology

3.1 *Definitions*—For definitions relating to property and asset management, refer to Terminology E2135.

3.1.1 *independence*, *n*—free from conflict of interest.

3.1.2 *independent data source*, *n*—information that is autonomous from the official record.

3.1.3 *inventory verification*, *n*—physically or electronically confirming the existence and location of an asset or group of assets.

3.1.4 *overage*, *n*—assets that are located during the inventory verification that were not previously recorded.

3.1.5 *reconciliation*, *n*—the process of comparing the assets and associated data collected during the inventory verification against the entity's assets record information.

3.1.5.1 *Discussion*—The reconciliation serves to verify existence of assets contained in the official records and the accuracy of the data maintained on the records, with corrective action taken as necessary.

3.1.6 *shortage*, *n*—assets that are not located during the inventory verification that were previously recorded.

4. Significance and Use

4.1 Inventory verification is conducted to accomplish one or more of the following:

4.1.1 Assess the accuracy of asset records,

4.1.2 Update asset records,

4.1.3 Assess asset loss experience,

4.1.4 Identify process inconsistencies, and

4.1.5 Provide the status of the verified assets for reporting purposes.

4.2 A properly conducted inventory verification provides data that may be used to report, at a minimum, that quantity on record equal quantities on hand.

4.2.1 Identifying shortages is critical for assessing the entity's asset management system.

4.3 During the inventory verification, record deficiencies, such as incorrect locations or other descriptive information that may be identified. These records should be corrected as part of the reconciliation phase.

4.4 Assets may be located during the inventory verification process for which a record does not exist. Records should be created upon identification of these assets to ensure asset accountability.

4.5 Inventory verification serves as a deterrent to loss, theft, damage, and misuse so those responsible for assets perceive that they will be held accountable for such assets, and will be required to produce proof of existence of those assets on a periodic basis.

4.6 An inventory verification may include identification or verification of additional information, such as use, condition, status, serial number confirmation, model confirmation, manufacturer confirmation, assigned user, year of manufacture, etc.

5. Physical Inventory Planning

~~3.1~~

5.1 *General*:

~~3.1.1 A physical inventory is an assessment or audit. An effective physical inventory provides information of value that equals or exceeds the cost of the activity. For the results to be valid and useful, complete the physical inventory by consistently applying written procedures. As physical inventories generally measure performance over a period of months or years and results are often trended, it is desirable to repeat past inventory practices in order to make results comparable.~~

~~3.1.2 As physical inventories are generally efforts involving significant time, resources, complexity, and personnel, appropriate project management techniques should be employed. Address the elements in 3.2 through 3.13~~

5.1.1 Detailed planning, coordination, and adequate supervision are necessary to ensure success of the inventory verification. Written procedures for planning, conducting, and reconciling are requisite to conducting a successful inventory verification. Inventory verifications should be completed by consistently applying these written procedures. Inventory verifications generally measure performance over a period of months or years and results are often compared to identify trends or problem areas. Entities that repeat past inventory verification, unless found to have been previously deficient or ineffective, will be able to make the results comparable from year to year.

5.1.2 As inventory verifications generally involve significant time and, resources appropriate project management techniques should be employed. Written procedures for planning the inventory verification should address the elements in 5.2 through 5.13 when planning.

~~3.2~~

5.1.3 There are several factors an entity must consider prior to determining the appropriate inventory verification method. These factors include:

5.1.3.1 The type of asset(s),

5.1.3.2 The number of assets,

5.1.3.3 The number of locations,

5.1.3.4 The required data elements to be collected,

5.1.3.5 Cost restrictions, and

5.1.3.6 Resources.

5.2 *Management and Accountability* —Assign responsibility, authority, and accountability for the conduct of physical inventory and for the results of the inventory.

~~3.3—Assign responsibility, authority, and accountability for the conduct of the inventory verification and the results.~~

5.3 *Key Results Required*—Prior to planning an inventory, determine the decisions that will be made based upon inventory

results and the key results required to make these decisions. For example, a common decision is whether or not a control system is effective; the find rate by value or number of items is often used as a key determinant. The number or percent of unrecorded assets (overages) is an indicator of an organization's success at achieving control of inbound or newly fabricated assets. All subsequent elements of physical inventory planning must accommodate measurement of key results with sufficient accuracy and precision for decision-making.

3.4—*When planning, an entity should determine the questions or actions, or both, that will be addressed based on the results of the inventory verification. For example, common questions include:*

• How effective are the processes associated with asset management systems?

• What is the percentage of located assets by value and physical count? Value may include original acquisition cost, net book value, or market value. Once a value is selected, it shall be used consistently. This is an indicator of an entity's success, or lack thereof, in managing its assets.

• What is the number or percentage of overages? This is an indicator of an entity's success at achieving control of or data management over inbound or newly fabricated assets.

• What is the percentage of undocumented or unrecorded location changes? This is an indicator of an entity's location record accuracy and process of asset control and record updates supporting moves and transfers.

All subsequent elements of inventory verification planning must accommodate measurement of key results with sufficient accuracy and precision for decision-making.

5.4 *Population*:

3.4.1Determine the population to be inventoried. A population may be defined by equipment type, value, location, age, controlling organization or program, use status, or other control categories. Determine whether to conduct a complete inventory of those categories or employ a sampling technique. If sampling techniques are employed, determine the sampling method and size before selecting a sample. The sample must be adequate to yield data of sufficient accuracy to meet the desired objectives. If find rates or other data are required for subsets of the population, for example by organization, then sample sizes must be sufficient to yield data for those subsets with sufficient accuracy and precision to be valid and useful.

3.4.2The population to be inventoried should be set at the beginning of the inventory period and "frozen." New receipts after the beginning of the period should not be included, nor should items transferred or disposed be excluded, from physical inventory reconciliation and statistics. Establish clear policies for removal of items from the population due to other circumstances (for example, if it is determined in the course of an inventory that an item was previously sold or cannibalized).

3.5

5.4.1 Determine the population to be verified. A population may be defined by asset type, value, location, age, controlling entity or program, use status, or other categories. A population may also be defined using the criteria in Practice E2608.

5.4.2 The population to be verified shall be set at the beginning of the inventory verification period and "frozen." New receipts after the beginning of the period should be excluded from the count and assets transferred or disposed prior to the beginning of the period should be excluded from the inventory verification reconciliation and statistics. Establish clear asset management procedures for removal of assets from the population due to other circumstances (for example, if it is determined during the course of the inventory verification that an asset was previously sold or cannibalized).

5.5 *Independence*—Determine the extent to which the physical inventory will require data to be drawn from sources independent of those responsible for property. Independent data sources are more accurate but can be more expensive to employ. Use barcode scanners or other electronic devices to ensure data accuracy without independence.

3.6—*Internal controls are established to determine how an inventory verification is conducted, verified, reconciled, recorded and reported. Independence is established by removing conflicts of interest through defining roles.*

5.6 *Data Requirements*—Beyond the key results, determine the need to verify or update various data elements (based upon business needs) during the physical inventory. At a minimum, a physical inventory validates inventory verification. Many entities update the existence and location of property. Otherdata element; other information may also be verified or updated. Employ floor-to-record (See Practice E2604.)

5.7 *Validation of Record Existence*—Employ asset-to-record checks and other techniques to determine the record accuracy status that existed prior to the commencement of the physical inventory.inventory verification.

3.75.8 *Validation Techniques*—Determine the validation and data gathering techniques permissible for the inventory verification. Validation techniques physically or electronically (or both) confirm the existence and location of an asset and may include: barcode scanning, radio transmission, RFID, owner validation, validation by an independent individual, two- signature validation, validation by transactions or records (for example, receipt, maintenance, transfers of accountability or location, network log-on or use records, and shipping papers),papers) and others. All acceptable techniques shall meet the independence requirements established in 3.55.5 and , gather the necessary data required by 3.35.3 and 3.6.

3.85.6, *and be documented in the entity's inventory verification procedures. Software processes and protocols should not allow for undocumented and unauthorized alteration of documentation or records.*

5.9 *Result Validation*—Some organizationsentities have requirements for independent validation of results. This validation can be incorporated into the inventory conduct verification itself or occur after the inventory period. verification close. Determine if any such requirement exists and, if so, establish inventory verification plans or procedures to meet the requirement. Generally,