13. Materials Management

- The Recreation and Park Department's inventory controls are inadequate. The Department lacks materials management policies and procedures, and thus lacks standardization and accountability in purchasing, storing, and recording use of the Department's materials and supplies.
- The Recreation and Park Department's Structural Maintenance Division has no inventory of maintenance materials and supplies, despite an annual materials and supplies budget of \$899,900. The sheet metal and carpenter shops keep informal records of materials on hand, but none of the trade shops keep a running total of inventory balances. Structural Maintenance Division staff charge capital projects for materials and supplies but do not charge maintenance work orders. Consequently, the Recreation and Park Department has no means to audit materials and supplies usage and cannot calculate the value of its existing inventory. Also, the Recreation and Park Department has not conducted a physical count of the Department's general inventory in at least five years.
- Under current practice, Structural Maintenance Division staff purchase low-price items on departmental purchase orders, which requires processing a separate purchase order for each item, rather than blanket purchase orders that allow several low-price items to be purchased from a vendor on a single purchase order. For example, the Structural Maintenance Division used a departmental purchase order to purchase an electrical ground rod and clamp from an electrical supply company for the purchase price of \$13.65, including tax, which was less than the Department's cost to process the departmental purchase order of \$15.000, effectively doubling the cost of the purchased item. The Recreation and Park Department should train Department staff on the proper use of blanket purchase orders and restrict use of blanket purchase orders to the appropriate supervisor or manager level to ensure control over purchases.

Inadequate Storage of Materials and Supplies at the Structural Maintenance Division

The Structural Maintenance Division does not have a storeroom in which to store materials and supplies that the Division procures for use in maintenance work. The Structural Maintenance Division orders materials and supplies from vendors, receives the materials and supplies at the Structural Maintenance Division's yard, and stores the materials and supplies either in the shop that placed the order, a shed bay assigned to that shop, or in the open, central storage area of the Structural Maintenance Division's yard. During FY 2004-2005, the Structural Maintenance Division's actual expenditures for materials and supplies, including expenditures for capital projects, were \$899,900.

The Structural Maintenance Division does not maintain an inventory of the many thousands of dollars in material and supplies stored in the trade shops, in shed bays, or in the open, central yard. A few shops, such as the sheet metal and the carpenter shops, maintain informal records of materials on hand. However, none of the shops keep a running total of inventory balances as a properly operated storeroom would.

With the exception of work orders for reimbursable work and capital projects, the Structural Maintenance Division does not record material usage on its work orders. This practice negates the possibility of auditing material usage by tracking material procured on purchase orders to its use on work orders.

Some of the materials maintained by the shops are old, while some are obsolete. For example, the Electrical Shop maintains light fixtures, disconnects, circuit breaker panels, and incandescent lights that are obsolete.

Due to the foregoing conditions, neither the Maintenance Superintendent nor anyone else within the Recreation and Park Department knows the value of the materials and supplies maintained by the Structural Maintenance Division. Further, no one knows the value of the materials used on specific work orders, other than work orders for capital projects and reimbursable jobs, or the annual value of material and supplies losses, if any.

The Recreation and Park Department Storeroom and Control of Materials and Supplies

The Recreation and Park Department maintains a storeroom that is co-located with the Structural Maintenance Division's yard in Golden Gate Park. This Department storeroom primarily stores athletic, gardening, and housekeeping equipment, and tools that are issued to the Department's gardeners, mowers, custodians, and recreation centers and swimming pools, entities external to the Structural Maintenance Division. The inventory of supplies and materials maintained by the Department storeroom are under a formal inventory system. The Department storeroom does not store the lumber, sheet metal, paint, plumbing and electrical devices and fixtures, or other material used by the Structural Maintenance Division in performing maintenance work. The Department storeroom only issues housekeeping items and such disposable items as gloves and alkaline batteries to the Structural Maintenance Division. Of \$899,900 expended by the Structural Maintenance Division for materials and supplies in FY 2004-2005, only \$7,918, or approximately 0.88 percent, were drawn from the Department's storeroom inventory.

The value of storeroom issuances for FY 2005-2006 was \$281,206. The value of the storeroom inventory as of June 30, 2005, was \$255,775. Thus, inventory turnover for FY 2004-2005 was 1.1, based on the ending inventory value of \$255,775.1

The lack of an inventory of supplies and materials maintained by the Structural Maintenance Division is a situation that the Recreation and Park Department should not allow to continue.

this case.

¹ The average value of storeroom value, calculated by adding the year beginning value to the year ending value and dividing by two, is the normal method of calculating inventory turnover. The beginning value was not available in

The Structural Maintenance Division must provide reasonable assurance that its materials and supplies are safeguarded, without unduly inhibiting the efficiency and effectiveness of maintenance work.

The "Bone Yard"

The Recreation and Park Department nursery, which grows and supplies plants for use in the Golden Gate Park and throughout the City's parks, is located in a large area adjacent to the Structural Maintenance Division. In the southwest corner of the nursery, in an area of approximately one acre, is located an auxiliary storage area or "bone yard." Therein, the Structural Maintenance Division has stored all manner of material in various stages of disrepair or obsolescence. The bone yard contents include miscellaneous pipes and flanges, paraphernalia from a pagoda, backflow devices, old lamp poles, sewer pipe, electrical conduit, fencing, manhole covers, electrical vaults, statues of dogs, irrigation boxes, a building canopy, and many other items including a dump trailer that appears to be serviceable. Some of the items such as contractor leftover parts have never been used. The Structural Maintenance Division does not maintain an inventory of the items in the bone yard.

The management of the Recreation and Park Department should not permit the operation of this auxiliary storage area or "bone yard" to continue. In accordance with proper administrative practice and proper safeguarding of City property, "bone yard" items should be brought under inventory control or disposed of.

Uneconomical Procurement Practices: Cost of Processing the Purchase Order Exceeds the Value of the Item Procured

The City has various means of procuring goods and services. For relatively high cost items (currently, items above \$10,000), a purchaser in the Office of Contract Compliance will make the procurement by obtaining a minimum of three bids, or if the estimated cost of the item exceeds \$50,000, by formal Invitation for Bids.

Alternatively, the City Purchaser has the authority to delegate signature authority to departments up to the dollar amount stated in regulation 21.5 (a) of the *Rules and Regulations Pertaining to the San Francisco Administrative Code*, *Chapter 21*. The delegated limit is currently \$10,000.

A simpler method for procuring low-dollar-value items is to create a departmental purchase order using progress payments or on a blanket purchase order. These methods allow multiple procurements of relatively low-value items from a vendor using the same purchase order number, and is an efficient means of procuring, for example, plumbing hardware without having to create a departmental work order for each item.

The auditors have noted that the Structural Maintenance Division sometimes uses the departmental purchase order method for very low-cost items. As an example, the Structural Maintenance Division procured an electrical ground rod and a ground clamp from an electrical supply company for the cost of \$13.65, including tax, on a departmental purchase order. The approximate cost of completing a departmental purchase order for Structural Maintenance

Division personnel only, and not including the cost of higher management signature approval nor processing by the Division of Purchasing and Contract Administration, is \$15.

The Budget Analyst has been advised that the Department's Purchasing and Contract Administration Manager sometimes requires the Structural Maintenance Division to use departmental purchase orders for low-cost items for purposes of control. However, such control appears to be overly restrictive. A training session on the proper use of blanket purchase orders and restricting uses to certain individuals may provide the necessary level of control. The Budget Analyst recommends that the Purchasing and Contract Administration Manager consider these alternatives.

Lack of a Materials Management Policies and Procedures Manual

The Recreation and Park Department does not have a Materials Management Policies and Procedures Manual to standardize its processes for obtaining goods and services. Good practice requires that the Recreation and Park Department develop a Materials Management Policies and Procedures Manual to simplify and supplement the various Administrative Code and Office of Contract Compliance provisions that regulate the procurement of goods and services in City government. As an administrative control, a Materials Management Policies and Procedures Manual provides standardization and accountability. Policies and procedures manuals are an important part of internal control systems by creating standardization and accountability in recurring situations without constant intervention by management. The absence of a Materials Management Policies and Procedures Manual stems from a lack of appreciation by management of the power of policies and procedures as administrative controls. The Purchasing and Contract Administration Manager has stated that one of his objectives for FY 2005-2006 is to develop a Materials Management Policies and Procedures Manual. The Budget Analyst strongly recommends that the Purchasing and Contract Administration Manager accomplish that objective.

Examples of topics covered in materials management policies and procedures manuals that apply to storerooms are shown below in Table 13.1.

Table 13.1

Materials Management Policies and Procedures Manuals: Example Contents

- Policy and Functions of Materials Management
- New Stock Requests
- Warehouse Issues and Credits
- Warehouse Scheduled Deliveries
- Back Orders and Stock Reservations
- Inventory Stratification
- Active Inventory
- Blanket Purchase Order
- Purchase Requisitions

- Authorization to Withdraw Materials from the Warehouse
- Receiving
- Bin Locations
- Low Value Items (Free Stock)
- Repaired Components (Stock)
- Cost of Ordering and Cost of Carrying
- Inactive Inventory
- Cycle Inventory
- Management Reporting

Source: Public Utilities Commission's Water Pollution Control Division's Maintenance Management Policies and Procedures Manual

Failure to Perform Physical Inventories of the Storeroom

A basic principle of storeroom control is to conduct an annual physical inventory. The City storerooms that we have audited recently all commence their physical inventory activities at the end of the fiscal year by taking a before-count inventory, performing the physical count, adjusting the computer records to reflect the physical count, and running an after-count inventory to note differences, reconcile differences, if possible, and to record "shrinkage," if any. Taking an annual physical inventory is probably the most basic of inventory control principles.

As previously stated, the Recreation and Park Department operates a storeroom that is located in the Structural Maintenance Division's yard. According to the Classification 1936 Senior Storekeeper who has operated the storeroom for the last 19 years, the Recreation and Park Department has not conducted an annual physical inventory in at least the last five years. According to the Senior Storekeeper, management eliminated the physical inventory in order to avoid the cost of performing the inventory.

Compounding the significance of not performing an annual inventory is the fact that the Senior Storekeeper has worked alone in the storeroom for almost all his 19-year tenure. Another basic principle of administrative control, separation-of-duties, requires that no single individual should control a process from start to finish. Separation of duties provides a complementary check by another individual. Although management may legitimately accept the risk of not implementing a particular control due to considerations of cost or efficiency, wherever possible a compensating control should be substituted. By not performing annual inventories, Department management has exacerbated the risk of departure from the separation-of-duties principle rather than compensating for the departure.

Conclusions

We reviewed the operations of the Recreation and Park Department' material management operations and practices to determine whether those operations and practices are being administered in an economical, efficient, and effective manner. We found that the Structural Maintenance Division does not have a storeroom in which to store its materials and supplies, an inventory of its materials and supplies, a record material usage system (with the exception of work orders for reimbursable work and capital projects), or a materials management policies and procedures manual.

For purposes of control, the Structural Maintenance Division is sometimes required to use departmental purchase orders to procure low-dollar-value items that could be procured much more economically and efficiently on a blanket purchase order. This practice appears to be overly restrictive and inefficient.

Recommendations

The Structural Maintenance Division Manager should:

- 13.1 Establish a storeroom and otherwise develop and maintain an inventory of all high-dollar value material items and items that tend to experience losses.
- 13.2 Establish stock level and reorder points for high use items, to avoid stockouts of needed material and to avoid use of departmental work orders for single or few items.
- 13.3 Ensure that the material in the Structural Maintenance Division's yard is brought into inventory or reported for disposal.
- 13.4 Ensure that the material in the Bone Yard is brought into inventory or reported for disposal.

The Purchasing and Contract Administration Manager should:

- 13.5 Assist the Structural Maintenance Division in developing adequate controls for materials, supplies, tools, and equipment.
- 13.6 Assist the Structural Maintenance Division in establishing a storeroom or otherwise providing adequate safeguarding of materials and supplies.
- 13.7 Assist the Structural Maintenance Division in disposing of Bone Yard material not required.
- 13.8 Work with the Structural Maintenance Division to establish procurement procedures that are economical and efficient.

- 13.9 Develop a Materials Management Policies and Procedures Manual for the Recreation and Park Department.
- 13.10 Perform a physical inventory of the Recreation and Park Department storeroom as soon as practicable and at least annually thereafter.

Costs and Benefits

Implementing the above recommendations, which would institute fundamental management practices, can be accomplished within the Department's authorized resources. The benefits of implementing the recommendations would include: (a) adequate control over material and supply assets; (b) efficiencies in knowing what material and supplies are available; and (c) efficiencies in combining the procurement needs of the various shops and purchasing in economic quantities.