FACILITIES MANAGEMENT

FINANCE & INFORMATION SYSTEMS

PURCHASING PROCESS REVIEW

AUDIT REPORT #18-2003

Audit & Advisory Services

June 2018

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Background

In accordance with the UCLA Administration fiscal year 2017-18 audit plan, Audit & Advisory Services (A&AS) performed an audit of purchasing business practices that are managed by the Finance & Information Systems unit within the Facilities Management (FM) department.

FM, a subdivision and department of UCLA Administration, provides a wide range of services including the maintenance and renovation of buildings, grounds, and utility infrastructure of the Campus and Medical Enterprise. FM ensures an environment conducive to the educational mission of the University by supplying reliable power, state of the art classrooms and research facilities, and environmentally responsible business practices. The department supports the campus effort to advance sustainability through the Climate Action Plan, waste reduction, recycling, and energy management programs. FM maintains over 12 million square feet of State and Non-State funded building space, 415 acres of hardscape, landscape, roadways, utilities distribution infrastructure, manages construction projects up to $3 million in cost, and staffs nearly 900 facilities professionals. Under FM oversight, the Chiller Cogeneration Plant produces 75% of the campus demand for power.

Materiel Management personnel coordinate the procurement of materials and equipment for the various internal FM units, and function as a liaison with the campus Purchasing and Accounts Payable departments. Authorized staff utilize the department’s Maximo system to initiate purchase requisitions. Working through an interface that connects Maximo with the University’s BruinBuy procurement system, Materiel Management purchased approximately $55 million in goods and services during fiscal year 2016-17.

Divisions within FM include Design, Project Management & Operations (DPMO), Maintenance and Alterations (M&A), and Finance & Information Services (F&IS). Each division is overseen by a Director, who reports to the Assistant Vice Chancellor of FM.

Purpose and Scope

The primary purpose of the review was to ensure that F&IS’s organizational structure and controls related to purchasing activities are conducive to accomplishing its business objectives. Where applicable, compliance with campus and University policies and procedures were also reviewed. The scope of the audit focused on the following activities:

* Accountability Structure
* Purchasing Process
* Physical Security
* Receiving
* Returns

The review was conducted in conformance with the *International Standards for the Professional Practice of Internal Auditing* and included interviews, tests, and other procedures considered necessary to achieve the objective.

Summary Opinion

Based on the results of the work performed within the scope of the audit, FM’s organizational structure and controls are generally conducive to accomplishing its business objectives related to purchasing activities. However, controls and business practices could be further strengthened by implementing the following:

*Accountability Structure*

* Management should review all FM employees’ purchasing access and maximum transaction limits to ensure that each employee’s existing setup is aligned with their job responsibilities and management’s expectations.

*Purchasing Process*

* Management should ensure that buyers are aware of and comply with the delegated Low Value Order (LVO) limit of $25,000 per vendor per account per day. Any orders to the same vendor exceeding a total of $25,000 in the same day should be referred to campus Purchasing.
* Management should ensure that employees create orders in BruinBuy at the time of purchase commitment and prior to the event taking place or the service being provided, using an estimate or quote from the vendor. BruinBuy orders should not be created after the event has occurred or service has been provided. Also, management should consider performing periodic spot checks of purchase transactions to ensure that orders are created at the time of commitment. By providing ongoing communication and additional training to staff, as needed, the University will be better protected through use of the proper terms and conditions, vendors may be paid more timely, and more accurate budgeting data is created.
* Management should ensure that buyers are aware of and utilize existing purchase agreements prior to submitting BruinBuy orders so the University benefits from the best pricing and delivery terms.

*Physical Security*

* Management should ensure that all security cameras are functioning properly and views are not obscured in any way. All cameras should be cleaned periodically and the one camera that is offline should be repaired or replaced as soon as possible. If security cameras still do not show a clear image after cleaning, management should consider purchasing new replacement cameras so that receiving areas can be adequately monitored.
* Management should encourage division Directors to develop and implement a policy and procedure to ensure that purchased items are retrieved from the receiving area in a timely manner. By requiring items to be picked up more promptly, additional space will be available to accommodate future purchases, and the risk of possible theft or damage to existing items on hand may be reduced.

*Receiving*

* Management should require all employees who receive items document their review of the quantity and types of items being received by clearly signing their initials and the date of review. By documenting the receipt of goods, evidence is created that receiving was performed and by whom. In addition, questions regarding the received order can be directed to the employee who performed the receiving.

The audit results and corresponding recommendations are detailed in the following sections of the report.

Audit Results and Recommendations

Accountability Structure

Distributed Administrative Computing Security System (DACSS) web reports were generated, summarized, and reviewed to evaluate the adequacy of FM’s accountability structure over purchase transactions. In addition, discussions were held with management to discuss the appropriateness of system access for purchasing and receiving functions. The following were noted:

1. Purchasing and Receiving Functions

In DACSS web, A&AS generated the "Users and Their Access by Appt Unit" report for sub division 5490 (FM) to review users with purchasing and receiving functions. Data was sorted by function type and filtered by AP730 (purchasing) and AP760 (receiving) function codes. Title codes for each employee were obtained from the campus OASIS system. The number of employees with maximum transaction amounts greater than or equal to $100,000 and/or with both AP730 and AP760 functions were identified for testing. Query results were combined for the employees with different appointment departments, sorted by user last name, and then reviewed for appropriateness. The Materiel Manager and F&IS Director were contacted to confirm that the current setup for employees’ access and maximum transaction limits align with job responsibilities and management expectations. A sample of user transactions were also reviewed in BruinBuy.

A&AS identified 17 FM employees (including those in Materiel Management) with both AP730 and AP760 functions that were active in BruinBuy. Of these 17 employees, we noted that three from the Materiel Management unit should have their maximum purchasing limits adjusted to better reflect their current job duties. As Table 1 below shows, the Materiel Manager had a maximum purchasing limit of $21.5 million, at the time of the audit in August 2017. FM staff indicated that this level of authority was needed for past purchases that supported the Cogeneration Plant. A&AS queried BruinBuy for all purchase transactions between January 2010 and October 2017, to determine the volume of transactions exceeding $1 million processed with the Materiel Manager’s logon ID. The query results showed that during this nearly eight-year period, three transactions from 2013 were processed for $1 million each; two transactions from 2014 for $1.2 million each; and one transaction also from 2014 was processed for $19.9 million. FM staff stated that the Materiel Manager’s purchasing limit can now be reduced because additional multi-million dollar purchases for the Cogeneration Plant will not be needed within the next few years. Table 1 also shows that two other Materiel Management employees’ maximum transaction limits should be adjusted (either increased or decreased) to account for the nature of transactions they handle.

Table 1

DACSS Purchasing and Receiving Functions

August 2017

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **#** | **Job Title**(Source: OASIS) | **Appointment Department Code** | **SAR Department Code** | **DACSS Function Code** (**[[1]](#footnote-1)**) | **Maximum Transaction Limit** | **Notes** |
|
| 1 | Manager | 3405 | 3405 | AP730 | $50,000 |   |
| 3405 | 3405 | AP730 | $21,500,000 | Materiel Manager: Materiel Manager stated that maximum transaction amount can be decreased. |
| 3405 | 3405 | AP730 | $200,000 |   |
| 3405 | 3405 | AP760 |   |   |
| 2 | Admin Specialist | 3405 | 3405 | AP730 | $500,000 | Materiel Management Buyer:Materiel Manager stated that maximum transaction amount should be decreased to $150,000. |
| 3405 | 3405 | AP760 |   |   |
| 3 | Admin Specialist | 3405 | 3405 | AP730 | $500,000 | Materiel Management Buyer: Materiel Manager stated that maximum transaction amount should be increased to $750,000. |
| 3405 | 3405 | AP760 |   |   |

An additional 12 FM employees (outside of Materiel Management) were identified who had maximum purchasing limits greater than or equal to $100,000; however, discussion with management indicated the existing limits appear justified for these employees in consideration of their job responsibilities.

Recommendation: Management should review all FM employees’ purchasing access and maximum transaction limits to ensure that each employee’s existing setup is aligned with their job responsibilities and management’s expectations.

Response: FM has reviewed all the delegation levels and has adjusted the levels to be aligned with the job responsibilities. These levels have been adjusted several times since this audit was done, to accommodate changing levels of authorization needed. This is complete but will require on-going adjustment.

1. Mandatory Reviewers for Purchasing Transactions

Using Campus Data Warehouse (CDW) reports, A&AS determined that there are six mandatory reviewers for purchasing transactions under sub division 5490. The specific breakdown of these six mandatory reviewers are as follows:

* Two reviewers (F&IS Accounting & Finance Manager; Purchasing, Contracting & Materiel Manager) receive Post Authorization Notices (PANs) for all purchasing transactions;
* One reviewer (Executive Director of Financial and Administrative Services) receives PANs for all purchasing transactions equal to or greater than $5,000;
* One reviewer (F&IS Director) receives PANs for all purchasing transactions equal to or greater than $20,000; and
* Two reviewers (M&A Principal Budget Analyst; M&A Chief Operations Officer) receive PANs for all purchasing transactions for Department 3050 – Office of the Assistant Vice Chancellor only.

A&AS concluded that the existing setup of mandatory reviewers for purchasing transactions appears adequate and appropriate.

There were no significant control weaknesses noted in this area.

Purchasing Process

Discussions were held with FM management and staff to determine whether there were adequate internal controls over the purchasing process. An analysis of fiscal year 2016-17 purchasing data was performed with information obtained from the CDW. The following were noted:

1. Low Value Order (LVOs)

To verify whether there were any LVOs executed above the $25,000 per vendor per account per day limit delegated to FM by campus Purchasing, A&AS obtained Purchasing – Accounts Payable Query Data Base (QDB) data for analysis. A query was created using Microsoft Access from the order header, detail, and distribution tables and then filtered to highlight FM order department codes and LVO transactions. Query results were exported to Microsoft Excel and the “CONCATENATE” function was used to organize purchase orders with the same vendor, order date, and account number. The order distribution amount was subtotaled and all vendor totals over the allowable $25,000 threshold were identified.

A judgmental sample of 10 vendors was selected for testing. The total number of orders for each vendor per date were counted. For vendors noted with change order transactions occurring on the same date, PANs were reviewed and then calculations were performed to confirm the total dollar amount of transactions per day. Transactions were reviewed for each vendor and date to verify whether any LVOs exceeded the $25,000 per vendor per account per day limit. For those LVOs identified as being over the limit, A&AS reviewed the transaction details to evaluate whether it appeared that those LVOs were split to enable individual parts of an otherwise single transaction to remain below the delegated ceiling.

Based on test work performed, seven of the vendors tested had LVOs that exceeded the delegated $25,000 per vendor per account per day restriction. The number of LVOs per vendor per day varied from one to seven orders. In addition, there did not appear to be an inherent business justification for executing multiple transactions with a single vendor and account within the same business day. The effect of using LVOs in this manner bypasses internal controls over higher dollar transactions which typically receive additional review prior to their approval.

Recommendation: Management should ensure that buyers are aware of and comply with the delegated LVO limit of $25,000 per vendor per account per day. Any orders to the same vendor exceeding a total of $25,000 should be referred to campus Purchasing.

Response: FM has met with all the buyers, both individually and as a group, to reiterate the policies around the LVO limit and the need to be strictly enforced. This is complete but will require periodic follow-up and retraining when necessary.

1. BruinBuy Input Delay

To verify whether purchase orders are created in BruinBuy at the time of commitment and prior to the event taking place or the service being provided, purchasing data was exported to Microsoft Excel for analysis. The “IF” function was used to determine whether purchase orders were created after the invoice dates, and to show the total purchased by each vendor. A&AS met with Materiel Management staff to help identify any vendors that should not be tested because of existing agreements, those with recurring charges, etc. (e.g., purchased utilities vendors). Ten vendors were selected for testing and the number of purchases per vendor were identified where the purchase date was after the invoice date. The “DATEDIF” function was used to assist in calculating the number of days elapsed between the order and invoice dates.

Based on test work performed, there were a total of 127 transactions created in BruinBuy after the event had occurred or goods and services were provided. The number of days elapsed between the order and invoice dates ranged from 1 to 218 calendar days. Per UCLA Campus Purchasing procedures, the department should have created the order prior to the event taking place and at the time of commitment using an estimate or quote from the vendor. This delay also creates a potential issue because an encumbrance was not placed on the funds, which could result in inaccurate budgeting decisions being made by management. By issuing the order at the time of commitment and prior to the event taking place, the University’s protective terms and conditions are provided to the vendor that govern the transaction.

Recommendation: Management should ensure that employees create orders in BruinBuy at the time of purchase commitment and prior to the event taking place or the service being provided, using an estimate or quote from the vendor. BruinBuy orders should not be created after the event has occurred or service has been provided. Also, management should consider performing periodic spot checks of purchase transactions to ensure that orders are created at the time of commitment. By providing ongoing communication and additional training to staff, as needed, the University will be better protected through use of the proper terms and conditions, vendors may be paid more timely, and more accurate budgeting data is created.

Response: FM has reiterated with all the buyers that all orders need to be processed in BruinBuy prior to being issued to the vendor. Initial spot checks has verified that 100% of the time the orders have been processed in BruinBuy prior to being issued to the vendor. This is complete but will require periodic follow-up and retraining when necessary.

1. BruinBuy Order Class

A&AS analyzed purchase transactions from a sample of 10 vendors to determine whether any items processed as “N” order class (LVO) were from vendors that had existing purchase agreements in place. For vendors with existing agreements established, audit testing was conducted to determine whether the sample transactions should have been more appropriately submitted as "A" class orders (Blanket Orders & Release Orders). Our review disclosed that 84 transactions were processed as LVOs from vendors that had established purchase agreements in place and, as a result, the transactions should have been submitted as "A" class orders.

UCLA enters into a variety of vendor and strategic sourcing agreements that are intended to provide goods and services at the best overall value, and to protect the University by applying appropriate terms and conditions for the purchase. By not submitting orders using the most appropriate order class, FM may not receive the best pricing and protective terms and conditions.

Recommendation: Management should ensure that buyers are aware of and utilize existing purchase agreements prior to submitting BruinBuy orders so that the University benefits from best pricing and delivery terms.

Response: FM has met with all the buyers, both individually and as a group, to reiterate the policy that University sourcing agreements must be included before deciding on issuing an order. FM will use University sourcing agreements whenever they provide the lowest cost and/or best availability. This is complete but will require periodic follow-up and retraining when necessary.

1. Competitive Bidding Threshold

Purchasing data was analyzed to verify whether any purchases exceeding the $100,000 threshold were competitively bid, as required in UC Business and Finance Bulletin BUS-43, “Materiel Management.” Data was exported into Microsoft Excel and a pivot table was created to include the vendor and order paid amount. Data was sorted by vendor with the largest sum of gross order amounts. Data was then further organized by individual transaction amount to enable sample selection.

From the data sorts, 253 transactions over $100,000 were identified, excluding those from vendors related to purchased utilities, contract purchases, and other recurring transaction types. A sample of 10 transactions exceeding $100,000 from eight different vendors was selected for testing. A&AS reviewed applicable invoices, BruinBuy screens, PAN screens, vendor agreements, sole source request forms, etc. Where applicable, additional vendor and purchase order information was requested from campus Purchasing.

Based on the test work performed, A&AS determined that two transactions were requisition estimates (the orders were either not placed or cancelled), two utilized purchase agreements that were competitively bid by the campus, and six were sole sourced purchases with appropriate justifications. Audit test work of the sample transactions did not disclose any instances where competitive bidding should have been used, but instead other procurement methods were improperly utilized.

There were no significant control weaknesses noted in this area.

1. Low Value Items (Tool Crib Orders)

A listing of purchase transactions was reviewed to verify whether certain low value items (e.g., flashlights) that are purchased separately multiple times throughout the year could receive a price discount if they were purchased in larger quantities (potential discounted pricing and less administrative time to process orders). The purchase listing was filtered to show any low value items (less than $50) by order lines and by order total. A&AS discussed with Materiel Management staff the types of low value items typically purchased. Staff indicated that the FM Tool Crib is a unit that orders various low value items frequently throughout the year.

Discussions with the FM Warehouse Manager disclosed that the current Tool Crib inventory application, Crib Master, works with revolving stock but would not work with ordering in bulk quantities. For the vendors used, there tends to be set prices for items purchased, whether they are bought in bulk or not. To reduce the volume of Tool Crib orders submitted by Materiel Management, the Warehouse Manager offered a possible solution of maintaining low value items stocked in the Warehouse (and not in the Tool Crib). This option, however, would reduce accountability for these low value items, so FM management would need to determine whether any potential benefits outweighs the risk.

There were no significant control weaknesses noted in this area.

1. Duplicate Payments

A&AS utilized TeamMate Analytics to identify possible duplicate payments processed during fiscal year 2016-17. Duplicate entries based on vendor and invoice number were highlighted and then extracted from the purchasing data. BruinBuy detail and related invoices were also reviewed for each of the transactions extracted. Although one potential duplicate payment (two payments with the same invoice number) was identified through our review, they did not result in duplicate payments. The purchase involved one backordered item from the original invoice thereby referencing the same invoice number twice.

There were no significant control weaknesses noted in this area.

1. Personal Purchases

To verify whether there were any items that appeared to be personal purchases made with University funds during fiscal year 2016-17, A&AS created a keyword list of 33 higher risk vendor names and items. TeamMate Analytics was used to cross match over 13,000 lines of purchase activity information with any word(s) from the keyword list. Based on this cross matching, 147 line items were identified and extracted as having at least one word or phrase from the keyword list. The average cost of the 147 line items was $15.41, ranging from $0.01 to $50. The purchase transaction line descriptions for each of the results were manually reviewed for reasonableness.

From the 147 line items that matched words or phrases from the keyword list, A&AS also selected a sample of 10 line items for further review. Invoices and available supporting documentation for the 10 sample items were reviewed to identify any apparent personal purchases. Based on the review of available supporting documentation, A&AS concluded that all transactions identified through the key word match appeared reasonable and were associated with a legitimate business purpose.

There were no significant control weaknesses noted in this area.

1. Review for Potential Fraud

Purchasing data from fiscal year 2016-17 was obtained from Purchasing – Accounts Payable QDB and filtered in Microsoft Access by FM department codes to determine whether there were any indications of potential fraud occurring in transactions during the audit testing period. Data from the invoice and vendor tables were linked and then exported to Microsoft Excel for analysis. A&AS used TeamMate Analytics to remove any spaces and characters after the first five digits of the zip code to avoid potential format or matching errors.

The Microsoft Excel “CONCATENATE” and “Manipulate Fields” functions were used to combine the columns into one field and then list addresses in a consistent format for ease of matching. A&AS also obtained data from the QDB Employee Master file and filtered the data to only show Materiel Management employees. TeamMate Analytics “Manipulate Worksheets” function was used to verify whether any vendor addresses matched any Materiel Management employee addresses.

A&AS also obtained purchasing data from the CDW to determine whether delivery addresses and employee addresses could be cross matched. After reviewing the data, A&AS found that the delivery address field was limited to the purchase requestor’s name and no other delivery address information could be found in the QDB Data Dictionary. Although delivery addresses could not be cross matched with employee addresses, A&AS did note that there were no vendor addresses that matched employee addresses. In addition, the Materiel Management personnel explained that purchase delivery address fields are pre-populated in BruinBuy and cannot be edited.

There were no significant control weaknesses noted in this area.

Physical Security

As part of audit test work, A&AS staff observed areas where goods received are stored. Security camera screen captures were reviewed to verify whether cameras were functioning properly and not obscured in any way. Discussions were held with Materiel Management personnel to verify whether the security cameras were monitored by staff or management, and whether adequate policies and/or procedures were in place to ensure timely pick-up of received items from Materiel Management storage areas. The following were noted:

1. Physical Security – Cameras

One of the eight security cameras with views of the Materiel Management receiving areas was offline for maintenance during audit fieldwork. In addition, Materiel Management staff indicated that even the cameras that were online and functional did not provide a clear enough view to identify faces because the cameras may need cleaning. The inability of security cameras to provide clear views of all receiving areas, including being able to identify people’s faces, make it more difficult to hold individuals accountable if any items on hand become lost or are stolen.

Recommendation: Management should ensure that all security cameras are functioning properly and views are not obscured in any way. All cameras should be cleaned periodically and the one offline camera should be repaired or replaced as soon as possible. If the security cameras still do not show a clear image after cleaning, management should consider replacing so that receiving areas can be adequately monitored.

Response: FM is evaluating the quality of the existing cameras and will consider upgrading the video cameras in the receiving area to better capture the activities in that area.

1. Physical Security – Received Items

Items purchased through Materiel Management and shipped to the FM receiving area are not always picked up timely by purchase requestors or their designees. Upon observation and walk through of the area, A&AS noted that one box of supplies appears to have been stored in the receiving area for approximately five years. Other items observed in the area were stored for approximately 1 to 11 months. Presumably, the items were needed, approved for purchase, and either charged to a particular project or to re-stock a trade shop or other unit. Because the items observed in the receiving area were never picked up, it is unknown whether additional funds were used to re-purchase the items if staff forgot about the original order or if FM has potentially forfeited a vendor credit for the unused items because they were never returned to the supplier.

Some units appear to use the receiving area as their own individual storage site, stopping by to pick up supplies as they are needed, even though that is not the intended purpose of that area. FM staff indicated that an attempt is made to store as many parts and supplies inside the Materiel Management area as possible, but there is insufficient room to securely store and maintain all received items for an indefinite period of time. Consequently, additional items that are received after the interior space is at capacity must be stored outside in the Materiel Management yard area. Surveillance cameras are in place to view both interior and exterior areas where parts and supplies are stored. FM Stores staff issued an informal policy via email to encourage requestors to pick up their items timely, but timeliness of retrieval has only shown minimal improvement.

Recommendation: Management should encourage division Directors to develop and implement a policy and procedure to ensure that purchased items are retrieved from the receiving area in a timely manner. By requiring items to be picked up more promptly, additional space will be available to accommodate future purchases, and the risk of possible theft or damage to existing items on hand may be reduced.

Response: FM has been rearranging the receiving area in order to make pick-up and delivery by each shop easier. In addition, a study is underway on how to better allocate space for receiving and staging materiel.

Receiving

The FM Materiel Manager and staff were contacted to discuss the receiving process. A list of received items from fiscal year 2016-17 was reviewed and a sample of 10 packing slips was selected from Materiel Management files for testing. A&AS reviewed packing slips and Maximo data to verify whether received goods were inspected for quantity and quality, and then adequately documented. In addition, A&AS verified whether information associated with the received items was entered accurately as received in Maximo.

Packing Slips

Although all 10 packing slips included an “ENTERED IN MAXIMO” stamp and item information appeared to be entered accurately as received in Maximo, four packing slips showed no evidence that staff reviewed the quantity of items received and whether the quantity was accurate. Without adequate documentation that staff reviewed the quantity received, it is not clear whether receiving procedures were properly performed and by whom.

Recommendation: Management should require that all employees who receive items document their review of the quantity and type of items being received by clearly signing their initials and the date of review. Thoroughly documenting the receipt of goods increases accountability and facilitates more efficient follow-up whenever questions arise because the specific staff member involved is clearly identified.

Response: FM has reiterated for the Receiving personnel the need to fully document the receipt of all materiel. Documentation on Materiel that is shipped directly to installation locations will continue to be evaluated as less controls currently exist in those circumstances.

Returns

Returns and credits were discussed with FM management and other key personnel. A&AS selected a judgmental sample of 15 returns from a Maximo Returns List provided by Materiel Management staff. Supporting documentation (i.e., Returned Goods and Pick-up Memo, emails, etc.) were reviewed for completeness and reason for the return. Shipping data that included return dates and methods were also reviewed. The Excel “DATEDIF” function was used to calculate the number of days between the date Materiel Management was notified of the return and the date the item was returned. Returns with more than 40 days elapsed between the date Materiel Management was notified and the actual return date were discussed with the Materiel Manager and staff. A&AS noted that there were three returns that took between 41 and 181 days. Materiel Management staff indicated that the reasons for the delay could be a lack of follow-up by FM buyers or the vendor was late in picking up the item. Materiel Management stated that they have no control over vendor delays in picking up items. A&AS also reviewed invoices and BruinBuy transaction detail to identify whether returns were properly applied. Test items were discussed with FM Stores staff and additional documentation from Materiel Management files was reviewed, as needed.

There were no significant control weaknesses noted in this area.

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1. () Multiple AP730 lines for the same user reflect different sub-divisions, department codes, and/or account numbers. [↑](#footnote-ref-1)