FACILITIES MANAGEMENT

RECYCLING AND WASTE MANAGEMENT

AUDIT REPORT #17-2103

Audit & Advisory Services

October 2017

FACILITIES MANAGEMENT

RECYCLING AND WASTE MANAGEMENT

AUDIT REPORT #17-2103

Background

In accordance with the UCLA Administration fiscal year 2016-17 audit plan, Audit & Advisory Services (A&AS) performed an audit of recycling and waste management activities that are managed by the Design, Project Management, and Operations (DPMO), and Maintenance and Alterations (M&A) divisions within the Facilities Management (FM) department.

The UC Sustainability Practices Policy, Section III., F. 2., states that, “The University’s goal for diverting municipal solid waste from landfills…is zero waste by 2020.” For the purposes of measuring compliance with the zero waste goal, UCLA needs to meet or exceed 95% diversion of municipal solid waste. Ultimately, UC’s zero waste goal strives for the elimination of all materials sent to the landfill by 2020.

Initiated in 1990, the FM Recycling Program supports the University-wide target of zero waste by 2020 by providing recycling services on the campus grounds and in State-funded buildings. The program currently recycles nearly nine million pounds generated annually by the UCLA community. The total campus diversion stream consists of green waste, waste converted to energy, construction waste, electronic waste (e-waste), paper, cardboard, plastics, food composting, bottles and cans, wood and metal, and fluorescent light bulbs.

In 2010, UCLA Sustainability launched “Rethink Recycle,” a single-stream, or mixed recyclables, collection system. Nearly everything except food-related and animal waste can be placed in the single-stream recycling container. Waste haulers can separate these recyclable materials (paper, plastics, cans, glass, etc.) at their facilities, making recycling more convenient and less confusing.

M&A Custodial Services employees generally empty trash and recyclables inside buildings. DPMO Grounds employees generally handle diversion and sorting outside of buildings, but also collect recyclables in buildings not serviced by Custodial Services. As of February 2017, the recycling program had 21 full-time Grounds employees who are supervised by a Superintendent. Custodial Services had approximately 327 employees who are overseen by an Assistant Director.

Purpose and Scope

The primary purpose of the review was to ensure that DPMO and M&A’s organizational structure and controls related to recycling and waste management 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 areas:

* UC Sustainable Practices Policy
* Physical Security
* Financial Administration
* Rebates
* Education and Outreach

The review was conducted in accordance with the *International Standards for the Professional Practice of Internal Auditing* and included such tests of records, interviews, and other auditing procedures considered necessary in achieving the audit purpose.

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 recycling and waste management activities. However, controls and business practices could be further strengthened by implementing the following:

*UC Sustainability Practices Policy*

* Management should continue to work with Athens to improve the timeliness and accuracy of data on the Green Halo website (an online waste diversion and recycling tracking system). If Athens is unable to meet UCLA's needs, management should consider using another vendor.
* Employees should be provided additional training to ensure all recyclables are collected to maximize UCLA's waste diversion rate.

*Physical Security*

* Management should consider having the recycling yard (“New Bluegoose”) entry gates re-keyed and given only to a limited group of employees to ensure only authorized users have access to the yard.

*Financial Administration*

* Management should collaborate with Campus Purchasing and the UCLA Insurance and Risk Management departments to ensure that vendors have appropriate agreements and insurance to protect UCLA, should a vendor not provide adequate service or cause accidents or injuries while on campus.
* Management should remind mandatory reviewers to read their Post Authorization Notifications (PANs) in a timely manner to ensure that all transactions are properly reviewed in accordance with the UCLA Financial Policy.

*Rebates*

* Rebate documentation should be reviewed to ensure that UCLA is receiving the appropriate amounts from vendors.  Management should request documentation showing item weight or quantity information from vendors who do not already provide it, so rebate amounts can be properly reviewed.

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

Audit Results and Recommendations

UC Sustainability Practices Policy

The September 2016 UC Sustainability Practices Policy establishes goals in nine areas of sustainable practices: green building, clean energy, transportation, climate protection, sustainable operations, waste reduction and recycling, environmentally preferable purchasing, sustainable foodservice, and sustainable water systems. Reduction, reuse, recycling, and composting are the primary methods to be counted toward the municipal solid waste diversion from landfill goals. Section F of the policy describes its goal as “to strive for the highest form of resource recovery methods and the best use of the materials.” The hierarchy for resource recovery is as follows:

Source reduction – The reduction of waste is the highest form of resource recovery as it eliminates the products from being manufactured or transported in the first place.

Reuse – Reuse materials in their original form (e.g., use lumber for lumber, mugs instead of single use cups, and reuse course readers in subsequent classes. These methods maintain the embodied energy in each material).

Composting and recycling – Composting is the recycling of organics such as animal waste, bedding, green waste, and food waste into compost and mulch. Recycling refers to the conversion of waste into basic materials so they can be made back into new products.

A&AS conducted audit test work to verify the following:

* Whether UCLA’s FM recycling and waste management program is on target with progress towards the UC Sustainable Practices Policy of zero waste in 2020;
* The type of program monitoring, tracking, and metrics that have been developed by FM help ensure zero waste by 2020;
* The Waste Division’s reported diversion percentage through observation of the Green Halo website; and
* Whether the FM information presented in the latest progress report of the UC Sustainable Practices by Section is accurate and was properly calculated.

Interviews were conducted with the Deputy Chief Sustainability Officer and FM management, observations were made on the use of the Green Halo website, and the latest monthly progress report and the Annual Report on Sustainable Practices (including supporting documentation) were also reviewed. In addition, recycling and waste management procedures were reviewed to determine whether current procedures are adequate to help ensure compliance with the UC Sustainability Practices Policy. Walk-throughs with FM Grounds and Custodial staff were conducted to confirm whether collection and disposal procedures reflect current business practices. The following were noted:

1. UC Sustainability Practices Progress Reporting

In keeping with the University’s commitment to accountability, an annual report is provided to the Board of Regents each January on UC’s progress towards meeting the goals in the Policy on Sustainable Practices. At UCLA, an online waste diversion and recycling tracking system (Green Halo) and monthly progress report spreadsheet are used to identify the waste diversion percentage and other data that is reported to UCOP. Athens Services, a vendor that provides waste collection and recycling services to UCLA, manages the Green Halo website as part of their services. When Athens collects waste and recyclables from UCLA, the contents of bins are weighed, and the data is uploaded to the Green Halo website. Vendors and other campus units provide recycling data on varying types of items (metal, toners, e-waste, dining grease, and soap recycling), that the Recycling Coordinator adds to the Green Halo website and monthly progress reports to calculate the overall diversion percentage.

As of February 2017, UCLA’s diversion percentage was approximately 64%. FM Recycling and Waste Management is responsible for reporting information regarding solid waste and landfill waste. FM Energy Services is responsible for reporting greenhouse gases and potable water data.

According to Recycling and Sustainability management, the Green Halo website does not currently meet UCLA’s needs. Infographics are limited to pie charts, which makes it difficult to compare campus units. There is also a time delay from when the data is uploaded, so the diversion percentage may not be current or accurate when viewed. Computers on the Athens trucks are obsolete and are in the process of being replaced. With the current set-up, it is difficult for management to provide accurate progress reports.

Recommendation: Recycling and Sustainability staff should continue with their efforts in working with Athens to improve the timeliness and presentation of data on the Green Halo website. If, Athens is still unable to fulfill UCLA's operational needs, management should explore other vendor options to better address its requirements.

Response: Management is working with Athens to resolve issues regarding the accuracy and timeliness of data being entered into the Green Halo website. Management met with Athens and Green Halo representatives in late June regarding concerns. Specifically, management noted that entry dump tickets, etc., must be included as part of the Green Halo database. Athens has indicated the issue re: roll-off dumpsters has been resolved and that data is now live and accurate. Athens noted that while the weight entries are captured for three yard bins, there are occasions when some of the data fails to upload correctly from the trucks to the main database. In order to ensure no discrepancies, Athens has had to perform monthly audits of the data which has caused delays in reporting. Athens advised that they have been working to resolve the situation and expect to be live with three yard bin data by October 31, 2017. Once this data is included, the Recycling team will be able to verify that the information in Green Halo is correct.

1. Policies and Procedures

A&AS reviewed recycling and waste management policies and procedures to evaluate their adequacy in helping to facilitate compliance with the UC Sustainability Practices Policy. M&A Custodial Services’ cleaning procedures include supplies, equipment, ergonomics, and procedure points. Procedures that we observed in the Center for Health Sciences and Strathmore building include the collection of trash and recyclables from labs and offices, and placement in the correct outdoor bins.

Recycling procedure guidelines include the types of recyclables collected, collection routes, frequency of collections, and the collection process. A&AS observed Wilshire Center procedures including the collection of white and mixed recyclables from multiple suites, and their placement in the recycling truck compactor.

During a walkthrough with a Grounds employee, we noted that there were at least five recycling containers that had not been collected during the morning pick-up in the Wilshire Center. The employee who collected the recyclables may not have known the locations of all the bins. Overflowing recycle bins could result in recyclable items being placed in the trash or complaints to Recycling staff that would need to be addressed.

Recommendation: Employees should receive additional training to ensure that all recyclables are collected to maximize UCLA's waste diversion percentage.

Response: Current training involves a two week period where Grounds employees new to recycling pickup are trained by other Grounds employees currently performing the task. Management will conduct periodic audits of the training to make sure all necessary information is properly communicated.

Management will redistribute location maps and daily pick up schedules, as well as review work assignments with each Grounds recycling employee, to ensure they understand their role in helping the University achieve its zero waste goal. Management has also worked with Athens to develop signage which is being placed on dumpsters to help remind both Grounds Recycling team and University staff of proper disposal.

Physical Security

Meetings were held with FM staff to gain an understanding of the types of recyclables collected and where they are stored prior to pick up by outside vendors. Observations and walk-throughs were performed of recyclable and waste storage areas. In addition, key and remote access to the “New Bluegoose” recycling yard was reviewed to determine whether the area is secure when not in use and only accessible by authorized employees. Screen captures of the recycling yard surveillance cameras were also reviewed for adequacy.

The New Bluegoose recycling yard has a fenced upper and lower lot that is accessible via two automatic gates for employees who have been issued a key or remote controlled gate opener (remote). Items stored in the upper yard include trash, green waste, metal waste and refrigerators, electronic waste (e-waste), construction waste, Grounds unit plants and equipment, and a compactor. The lower yard has areas for sand, gravel, rocks, road base, recycle bins, and containers belonging to other FM trade units. During the course of the audit, six security cameras were installed with various views of the recycling yard, which are monitored by the Sr. Educational Facility Planner/Landscape and Grounds Manager. The camera footage is recorded on NVR (similar to home Digital Video Recorders) hard drives within the FM Information Services unit and stored between 30 and 180 days. After 180 days, the footage is automatically recorded over. Only selected FM employees have access to the recorded footage.

Test work and observation indicated that the New Bluegoose recycling yard is not limited to authorized employees. According to a list provided by the FM Supervising Locksmith, a total of 379 individuals currently have the X800 key that can open the gates to the recycling yard. Of the 379 individuals, at least 25 appeared to be non-FM employees. According to the FM Superintendent who oversees the yard, other non-FM employees from Athletics and Housing & Hospitality Services also have access to the yard. Although Athletics confirmed that their staff did not have access to the yard, Housing & Hospitality Services was unable to confirm whether they had access. Remotes have been issued to the Recycling staff and other FM areas, but FM management was unable to confirm the assignment for two of the 23 remotes issued. In addition, there have also been issues with employees inappropriately dumping items in the yard. For example, under a sign that reads “No Dumping of Florescent Lightbulbs and Ballast,” there was a large pile of lightbulbs.

Recommendation: Management should consider having the New Bluegoose recycling yard entry gates re-keyed and then only providing the new keys to a limited group of individuals to ensure that only authorized employees have access to the yard. Management should also take appropriate steps to discourage employees from improperly dumping lightbulbs or other refuse in the posted “No Dumping” area.

Response: Management is working to replace the entrance lock with a BruinCard swipe reader so all entries into the FM Yard can be identified to specific individuals. The reader will be programmed to only allow access to pre-approved employees. Furthermore, in the event illegal dumping does occur, management can then cross check BruinCard reader data with video from the existing yard cameras to identify the employee(s) involved. Installation of the BruinCard swipe reader will be executed by January 18, 2018.

Financial Administration

FM Recycling management and other key FM department personnel were contacted to discuss the department’s business practices surrounding vendors and invoices. Five recycling vendors provided services to the campus during the audit period: Athens – mixed recyclables; Allan Co. – metals and refrigerators; Alianza – e-waste; A&I – wooden pallets; and Printer Cartridge Recycling (PCR) – toner cartridges. A&AS reviewed the vendors’ information in BruinBuy, and also contacted UCLA Insurance & Risk Management, Campus Purchasing, and multiple FM units to verify whether documentation exists to show that the vendors were approved to conduct business with the University. In addition, requests were made of these campus departments to provide evidence of appropriate insurance coverage, as required by the University. Further, a judgmental sample of 15 invoices from fiscal year 2015-16 were assessed to verify that they were adequately documented, properly reviewed and approved, agreed with the terms of the purchase order, and charged appropriately. The following were noted:

1. Vendors

Five FM vendors collect recyclables from various campus locations and then issue rebates to UCLA based on these collections. A&AS noted that while the vendors appeared in the Campus Purchasing master vendor file, FM’s Maximo system, and in the FM Recycling unit’s listing of vendors, evidence of appropriate certificates of insurance could not be located. In addition, documentation of any current contract or agreement that would detail the services or collection schedule also could not be located. UCLA Purchasing, FM Recycling, FM Finance & Information Systems, and FM Material Management all indicated that they had no record of vendor agreements or certificates of insurance for these vendors.

Recommendation: Management should collaborate with the Campus Purchasing and Insurance & Risk Management departments to determine the specific vendor agreements and insurance requirements that apply to the recycling vendors. Once the determination has been made, FM should ensure that vendors have the appropriate vendor agreements and certificates of insurance indicating required minimum coverage to protect the University, should a vendor not provide adequate service or cause accidents or injuries while on campus.

Response: Recycling management currently connects selected vendors with FM purchasing to obtain the required information. Management will include a follow up process that involves obtaining copies of all the required documents.

Management is working with Purchasing and OIRM to develop a matrix of insurance and operating requirements for recycling vendors. Once the required documentation has been determined for each type of service, the respective documents for each vendor/service will be collated and reviewed to ensure compliance. Copies of all required documents will be kept in the Recycling Manager’s office. Management expects to have the situation resolved by January 2018.

1. Post Authorization Notifications (PANs)

Invoices were adequately documented, properly approved, agreed to the terms of the purchase order, and charged appropriately; however, one FM mandatory reviewer did not review PANs within two business days in accordance with the University Financial Policy. Audit testing indicated that PANs were not read in a timely manner by one mandatory reviewer for 14 out of 15 transactions, ranging from 325 to 689 calendar days. Further review with this employee indicated the transactions were reviewed per FM’s Maximo system notifications, but the PANs were not read. There were between two and four mandatory reviewers for these transactions, and the other mandatory reviewers did review their PANs in a timely manner. According to UCLA Financial Policy, section III.F, “A reviewer must review all transactions within two working days of receipt.” Timely review of PANs helps to ensure that all related financial activities are appropriate and adhere to University policies and procedures.

Recommendation: Management should remind mandatory reviewers to read their PANs to ensure that all transactions are properly reviewed in accordance with the UCLA Financial Policy. Management should also consider removing the one mandatory reviewer who is not reading PANs timely or reevaluating the types of transactions assigned to this employee, if they are unable to comply with the two-day review requirement.

Response: Management will send out reminders to current mandatory PAN reviewers regarding the need to ensure prompt review. Management will conduct a follow up review to determine if PAN notices are being timely reviewed. If a reviewer(s) is not reviewing on a timely basis, management will remove/replace said reviewer.

Rebates

Vendors’ pick-up recyclable items and provide rebates to UCLA based on the weight or quantity of items recycled. For fiscal year 2015-16, the total amount of rebates received from each of the five vendors is shown in the table below:

|  |  |
| --- | --- |
| **Vendor** | **Rebate Amount** |
| Allan Co | $         5,865.80 |
| Athens | $       43,490.84 |
| Distributor Operations | $         1,187.90 |
| e-Recycling | $         9,258.74 |
| PCR | $            624.36 |
| **Rebate Total** | **$       60,427.64** |

A judgmental sample of 10 rebates received during fiscal year 2015-16 were reviewed to verify that rebate amounts received from vendors were appropriate. Test work indicated that vendor rebates are not reviewed for appropriateness of amounts paid to UCLA. After further review of supporting documentation provided, A&AS was able to determine that six of the 10 rebate calculations appeared appropriate based on weight/quantity calculations provided on vendor documentation. Since documentation was limited for the four remaining rebates, the rebate amounts could not be confirmed.

Recommendation: Rebate documentation should be reviewed to ensure that UCLA is receiving the appropriate amounts from vendors. Management should request documentation showing weight, quantity, and/or calculations from vendors who do not already provide it, so rebate amounts can be properly reviewed.

Response: The focus of recycling efforts is to achieve zero waste. For larger revenue generating recyclable materials the reporting requirements are specified in the respective contract(s) and are cross checked with each rebate invoice. It is important to ensure that proper rebate payments are received, however, for some recycled content the overhead expense to crosscheck rebates with cost schedules is more than the potential rebate. Therefore, for recyclable materials that have negligible rebate, or diversion value, management does not have established agreements with the respective vendors. The vendors are, however, appropriately vetted before business is conducted and material weights being transferred as well as current market rebates are routinely reviewed to ensure fair compensation.

Education and Outreach

Marketing plans were reviewed with FM Sustainability staff and other FM personnel to determine whether marketing plans were implemented to inform faculty, staff, and students regarding UCLA's campus recycling program to help ensure the UC Policy target of zero waste by 2020 is met. The UCLA Sustainability and FM Recycling and Waste Management webpages have been updated. Sustainability e-newsletters are distributed to subscribers and articles are featured in UCLA News. Other education and outreach plans include the #MyLastTrash campaign, Waste Fair, social media outlet communications, sustainability courses, and recycling/compost containers and signage.

There were no significant control weaknesses noted in this area.

170622-4

REP