

Report on City Agency Mandatory Recycling

June 2016

Question: Should the enforcement provisions in Articles 5 and 6 of Chapter 9 be made applicable to the mandatory recycling program in order to eliminate or reduce violations of the program?

Background

When the City established the Recycling Coordinator position in 1989, the first program initiated by the Refuse Division was an office program for City administration buildings in compliance with City Ordinance 89-117 (Section 9-1.11). The ordinance specified that the following materials be recycled: newspaper, cardboard, office paper, aluminum cans, glass containers and plastic containers. The ordinance directed that the program was to be undertaken first on a voluntary basis, and then, if necessary, on a mandatory basis.

Recycling containers were distributed to city employees, central collection containers were placed in work areas, employees and custodial staffs were instructed on the new system, and a contract was established with a local recycling company for collection from each building. The program began in the City's major administration buildings, including Honolulu Hale, the Fasi Municipal Building (then Honolulu Municipal Building), the Municipal Records and Reference Center (MRRC), the Board of Water Supply on Beretania Street, and the Pawaa Annex, and has since been expanded to include about twenty City facilities. See Exhibit A for the list of current sites.

In 2004, City Ordinance 04-10 removed the voluntary option and established the program as *mandatory*. Articles 5 and 6, which stipulate enforcement provisions that include fines and imprisonment, were to remain inapplicable to the mandatory recycling program, with a biennial review and recommendation by the City Refuse Division.

This report is a review of the program and recommendation regarding enforcement. Prior reports were submitted to City Council in 2006, 2008, 2010, 2012 and 2014.

Operations

The City Agency Recycling Program is designed to collect white office paper, colored office paper, newspaper, cardboard and aluminum/glass/plastic beverage containers. City employees are given a collection box to keep at their desks to store recyclable paper. Acceptable and unacceptable paper types are printed on the box along with the City Recycling Branch phone number and website should employees have questions.

Sets of two to three stackable bins for waste paper are positioned in central locations on every floor. Most bins are located by copy machines. When necessary, employees bring the waste paper from their desk side box to the central collection points. Flattened cardboard boxes are left alongside the stackable bins.



Custodial staff collects the paper from the central collection containers and then transports it directly to the collection dumpster. For larger buildings with multiple floors that generate high volumes of waste paper, paper is consolidated into wheeled carts at a secondary storage area and then transported to the collection dumpster. A contracted recycling company picks up the paper from the central storage area designated in each building.



Recycling receptacles for aluminum, glass and plastic beverage containers are placed on the ground floor of each building. Building surveys revealed that most of the beverage containers are collected and recycled by the employees themselves in their work areas. This activity has increased further since the start of the HI5 deposit recycling program. The custodial staff handles the HI5 beverage containers deposited in building collection containers.



ENV's Refuse Division specifies and manages the recycling contract, purchases and provides the program equipment, educates staff and maintains program data. DFM's Building Maintenance Division manages custodial staff support, paper storage areas and on-site coordination with the recycling company for pickup.

There are City agencies not included under the recycling service contracts either because their offices are tenanted in commercial office buildings or they are small offices in outlying facilities that generate minimal volumes of paper. City agencies in commercial buildings are advised to participate in the building's recycling program, which is also required by City ordinance for all commercial buildings with 20,000 square feet or more of office space. Small offices are advised to drop off their paper in any of the City's facilities listed in the City's recycling contract. Collection containers are provided for their offices upon request.



Effective May 2015, City office buildings at 51 Merchant Street and 842 Bethel Street in downtown Honolulu were removed from the service contract for City office paper recycling because neither site has the interior or exterior space needed to store waste paper collection equipment (carts or dumpsters) and therefore cannot receive collection service. Both sites had previously stored collection carts in the buildings' stairwells – the only available interior space – but were advised against this during a recent inspection by the Honolulu Fire Department.

Education and Implementation

At the very beginning of the program, employees were educated through a coordinated series of slide show presentations. Brochures were distributed with their recycling container. Several articles appeared in employee newsletters. Currently, every new employee receives training and an information sheet on the City's office paper recycling program at their orientation. Recycling information for City employees is also maintained online at www.opala.org.

Each department has designated a recycling coordinator that collaborates with the City's Recycling Branch. Each participating building has designated a site supervisor who coordinates with the Recycling Branch, oversees custodial operations and monitors the recycling company collection.

City recycling specialists conduct inspections of City offices throughout the year, distribute equipment and informational brochures, and educate City staff. Recycling specialists train custodial staff on proper paper collection and recycling procedures for their respective facilities. Upon request, recycling specialists also conduct group training sessions for City employees, help install new collection equipment and help introduce and reintroduce recycling programs to new sites or to sites that have experienced high employee turnover.

Service Contracts

Since the start of the program in 1990 and through 2005, the recovered paper was auctioned to the highest bidder under contracts that ranged from one to three year terms. Longer contracts allowed the unit bid price to float with a price index established nationally in the Fiber Market News. The City has earned annual revenues ranging from approximately \$80 to \$12,000, depending upon market conditions. There was no cost incurred to collect the recovered paper.

At the end of 2005, the contracted recycling company indicated that they would not be able to continue servicing the contract under the established unit prices and for the first time would need to charge the City to collect the paper.

The recycling contract was restructured to allow for separate unit price bids for collection charges and a credit back bid on the value of the paper. From FY2006 through FY2009, the winning bids included a charge for the collection and offered no credit for the paper value. The FY2010-11 contract charged for collection and provided a small credit based on the value of the collected paper. The contract for FY2014-15 included a charge but no credit for the paper.

In September 2015 the collection was changed to a mixed paper system, allowing white and colored ledger, cardboard and newspaper to be collected together. Previously, the collection system allowed sites to set their waste paper out for collection using either 96 gallon carts and/or dumpsters. The current agreement specifies the use of dumpsters only. By simplifying the collection system and making this agreement accessible to more potential bidders, the intent was to open competition and create a more efficient collection system. Very few companies on island have the ability to service both carts and dumpsters simultaneously, whereas several companies are able to service dumpsters.



Under the new system, recovery rates increased by more than 15%, but the cost per ton increased due primarily to a downturn in the recyclable commodities market. The value of recycled paper is down more than 60% from 2012. The current cost per ton to collect and recycle office paper from City buildings is approximately \$385 per ton. This is up from \$244 per ton in FY2015. For comparison, refuse collection and disposal costs related to city buildings are approximately \$199 per ton.

The current mixed paper dumpster collection system is the most efficient and effective way to collect waste paper for recycling. However, to get more competitive pricing, the City plans to re-bid this service agreement once commodity prices have rebounded.

See Exhibit A for paper recovery data. Note that at the end of 2015 HPD offices in Pearl City and Wahiawa were added to the City's curbside "blue cart" recycling program and now have their recyclables collected through this program.

Evaluation

The City agency recycling program appears to be capturing the majority of targeted paper. City recycling specialists have observed little to no bulk paper in random inspections of building refuse dumpsters. Similarly, building custodial supervisors report that the program is operating smoothly with significant compliance.

Recycling rates have continued to increase steadily from FY2011. The City saw a moderate spike in recovery in FY2012 that is attributable to the addition of cardboard collection at several sites, and a 15% increase from FY15 to FY16 due to the implementation of the new mixed paper all dumpster collection system. Studies show single stream collection systems that allow all material to be deposited into the same collection container are easier for participants to use and therefore tend to recover more material.

It should be noted that the increase of electronic documentation and the need for confidential document shredding impacts the paper recycling rates. Shredding paper into a light and fluffy state makes collection less efficient and more costly. Shredding also significantly devalues paper as a recyclable commodity, so it is not included in this program. Shredded paper offers greater value at lower costs in waste-to-energy. The Zoo finds shredded paper a valuable resource for animal bedding and acquires it from HPD, Attorney General's Office and HFD.

Although the overall program seems to be working well, there may be individual employees not participating adequately. The question is whether this constitutes a violation, and whether any such violations should be addressed by applying the enforcement provisions in Articles 5 and 6, or by other means such as administrative directives, education and incentives.

Recommendation

We recommend that the enforcement provisions as specified in Articles 5 and 6 not be applied, and that the City continue to employ education and outreach, including administrative directives, providing recycling information in new employee orientation and periodic building walk-through by recycling staff to identify non-participants and assist them to recycle.

Further, we recommend that the requirement for a biennial evaluation and recommendation by the division on this matter be removed from ordinance, and the non-application of Articles 5 and 6 be established permanently. The division has submitted numerous reports, and does not foresee the

need for penalties. Enforcing against City agencies or employees with penalties is neither practical nor effective.

Articles 5 and 6, as written, specify enforcement provisions, which include punishment by a fine not exceeding \$500 or imprisonment for a period not exceeding 90 days, or both, for any person violating any provision of Chapter 9. It is unclear whether these penalties should be applied to the individual employee or to the agency and how to do so. It is also unclear what constitutes a violation. For example, would one piece of paper found in an employee wastebasket constitute justification to impose a fine on that person or agency, or would the employee(s) or agency need to demonstrate complete disregard for the recycling program?



Firm support, especially during this time of the “green” sustainability initiatives, should achieve greater results than punitive action. Increasing participation is more a matter of diligent institutional leadership and raising consciousness than individual reticence.

Exhibit A

CITY AGENCY OFFICE PAPER RECYCLING						
	FISCAL YEAR					
	2011	2012	2013	2014	2015	2016 (est)
ANNUAL POUNDS OF PAPER PER SITE						
BWS - Beretania	10,830	13,300	12,920	8,660	7,220	12,788
BWS - Pearl City	950	1,520	0	1,600	3,300	6,039
ENV - CSM	0	2,660	1,710	0	1,330	5,436
DFM - AES/Halawa	1,140	3,100	4,030	5,070	6,640	6,353
DFM - Corp Yard	380	0	0	0	0	0
DFM & DPR - Pearl City	2,700	3,730	8,090	6,700	7,820	13,341
Fasi Municipal Building	30,800	48,690	93,110	113,380	106,690	108,220
Gibson Building/51 Merchant St	6,080	10,450	9,120	10,720	11,020	10,235
HFD Headquarters	3,990	2,660	4,750	1,830	4,100	9,579
HFD Waipahu	4,660	7,820	6,300	6,480	5,700	7,233
Honolulu Hale	33,690	36,030	33,800	36,370	30,460	29,169
HPD Academy	0	1,500	2,720	2,910	2,100	4,833
HPD Beretania	12,190	21,330	21,330	21,140	20,050	27,615
HPD Pearl City	2,280	1,520	1,520	1,600	2,470	0
HPD Wahiawa	1,140	1,330	0	1,370	0	0
Kapolei Hale	14,240	14,400	14,320	19,200	12,500	13,218
Neal Blaisdell Center	380	1,140	1,800	5,920	6,840	6,981
Oahu Transit Services/Middle St	54,030	68,730	68,650	59,550	64,980	82,784
Oahu Transit Services/Pearl City	4,940	16,830	16,830	17,940	24,230	20,554
Sand Island WWTP	1,140	1,140	1,140	2,740	1,520	2,214
Honolulu Zoo	4,400	6,400	6,400	10,560	19,600	22,510
TOTAL POUNDS PER YEAR	189,960	264,280	308,540	333,740	338,570	389,102
TOTAL TONS OF PAPER	95	132	154	167	169	195
TOTAL COST	\$12,840	\$26,120	\$33,620	\$39,290	\$28,745	\$75,000
AVERAGE COST PER TON (rounded)	\$135	\$198	\$218	\$235	\$244	\$385