REPORT TO THE TWENTY-SEVENTH LEGISLATURE
STATE OF HAWAII
2013

PURSUANT TO SECTION 342G-15, HAWAII REVISED STATUTES,
REQUIRING THE OFFICE OF SOLID WASTE MANAGEMENT TO GIVE AN
ANNUAL REPORT ON SOLID WASTE MANAGEMENT

PREPARED BY:

STATE OF HAWAII
DEPARTMENT OF HEALTH
OFFICE OF SOLID WASTE MANAGEMENT
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I. INTRODUCTION

The Office of Solid Waste Management (OSWM) is required to provide an annual report to the legislature to describe the State's progress toward achieving the waste reduction goal. The report also contains general information about OSWM programs and the counties' solid waste and recycling efforts.

This report covers activities of both the OSWM and the Solid Waste Section (SWS) conducted during FY 2011-12. Both programs are contained within the Department of Health's Solid and Hazardous Waste Branch (SHWB). The SWS is the program responsible for permitting and monitoring solid waste facilities within the state, while planning functions are contained within the OSWM. The OSWM also administers the state Deposit Beverage Container (DBC) and Glass Advance Disposal Fee (ADF) Programs. The OSWM also provides technical and programmatic assistance to the counties in their development of solid waste management and recycling programs.

In 1991, the legislature established a waste stream reduction goal of 50% by the year 2000. The OSWM works to enhance the development of county and private recycling programs through a combination of statewide funding mechanisms and statewide guidance and mandates.

II. SOLID WASTE MANAGEMENT

Solid Waste Priorities and Practices

HRS §342G-2 requires the department and the counties to consider solid waste management practices and methods in the following order of priority:

1) Source Reduction
2) Recycling (to include composting)
3) Landfilling and incineration

The first two practices reduce the amount of waste to be either landfilled or incinerated.

Source reduction is also called “waste prevention” or “waste reduction” and means creating less waste. Although not included in the list of priorities, “Reuse”, means using a product over without first having to reprocess it. The product may be used for its original or intended use, or may be used in a different capacity. “Recycling” is the process by which materials are collected and used as "raw" materials to create new products. Collectively, these methods are sometimes referred to as “waste diversion.”

Because waste reduction avoids creation of waste it is inherently difficult to quantify. In some cases, comparisons can be made to waste levels before a waste reduction practice was employed to waste levels afterward. In other cases, an estimate of the amount of waste reduced is all that is possible.

Reuse of products or materials is marginally easier to measure than waste reduction. It is possible to quantify reuse because it involves actual material. Quantification can be made in numerous ways including counting the units of a particular product being reused or measuring its tonnage. However, effectively measuring reuse is still difficult because it takes place at so many levels and on a widespread scale. For example, many people regularly reuse plastic containers for food storage at home or in the workplace. While this particular activity contributes to overall waste reduction, it is impossible to accurately measure. Some reuse activity is accounted for in the diversion statistics presented in this report. For example, the amount of material that is donated to non-profit organizations such as the Salvation Army or Goodwill Industries.

Recycling is the most easily quantified activity of the waste diversion trio for at least two reasons. First, like reuse, it involves actual material that can be measured. Second, data from many recycling facilities is regularly collected by the state and counties.

Diversion refers to the combination of reuse and recycling activities. It does not include landfilling, incineration, or waste to energy processes. The diversion rates presented below are based mostly on data collected by the counties. The current diversion rate is composed primarily of recycling activity and a small amount of reuse activity.

The State’s diversion rate for FY 2011-12 could not be calculated due to incomplete county data. The department will continue efforts to gather FY 2011-12 and will provide updated data in its next report. EPA’s most recent data indicate a national recycling rate of 34.1% for 2010. The state’s goal of 50% waste diversion was set in 1991 and mirrored EPA’s recycling goal at the time. The EPA has revised its recycling goal of 50% by the year 2000 to 35% with no target date specified. This change was

made in recognition of the fact that states and municipalities need a broader time frame in which to reach higher waste reduction levels.

Hawaii's commercial recyclers continually deal with long standing challenges; the most notable being the high cost of shipping. Recycling markets for nearly all of the recyclable material collected in Hawaii are out of state. Recyclers will ship their material to the market paying the best prices at the time. Most recyclables are shipped to either the mainland U.S. or Asia.

Volatility in recycled materials markets is an issue that all recyclers deal with regardless of location. Hawaii's recyclers are, however, especially affected by market fluctuations because of thinner profit margins resulting from high shipping costs.

Solid Waste Disposal and Diversion Rates

The OSWM reports solid waste disposal and diversion rates by aggregating data collected by each county with data collected under authority of the Solid Waste Section's permitting system. The state's fiscal year begins July 1 and ends on June 30.

Table 1: Waste Diversion Statistics for FY 2011-12

	Disposal (Tons)	Diversion (Tons)	Generation (Tons)	Diversion Rate
Hawaii	152,949	94,062	247,011	38.1%
Maui	162,259	*		
Oahu**	761,714	480,639	1,241,775	38.6%
Kauai	70,945	34,156	105,101	32.5%
State	1,147,194	*		

Notes: *Incomplete county data; ** Calendar Year 2011 data

Table 2: Diversion rates for fiscal years 2007 through 2011

FY	08	09	10	11	12
Hawaii	29.2%	30.9%	35.9%	28.9%	38.1%
Maui*	33.1%	34.2%	35.3%	36.6%	*
Oahu	33.4%	37.2%	39.2%#	36.9%	38.6%
Kauai	29.6%	26.3%	25.0%	23.8%	32.5%
State	32.3%	35.7%	39.6%	35.1%	*

Notes: # Revised since the 2011 report; * Incomplete county data

III. OFFICE OF SOLID WASTE MANAGEMENT ACTIVITIES

Deposit Beverage Container Program

The State of Hawaii Deposit Beverage Container Program (Program) achieved an annual redemption rate of 77% in fiscal year (FY) 2012. Over 697 million deposit beverage containers (DBC) were recycled and public participation remained strong.

Program Redemption Rate

The DBC Program's redemption rate is a measure of effectiveness in accomplishing its mission to: (1) collect and redeem eligible deposit beverage containers; and, (2) recycle deposit beverage container materials.

The redemption rate for FY 2011-12 was 77%. The redemption rate is calculated by dividing the number of DBC redeemed by the number of DBC sold.

$$\text{Redemption Rate} = \frac{697{,}259{,}004 \textit{ (redeemed)}}{907{,}093{,}351 \textit{ (sold)}}$$

$$\text{Redemption Rate} = 77\%$$

CHART 1: Number of Deposit Beverage Containers Redeemed by Material Type

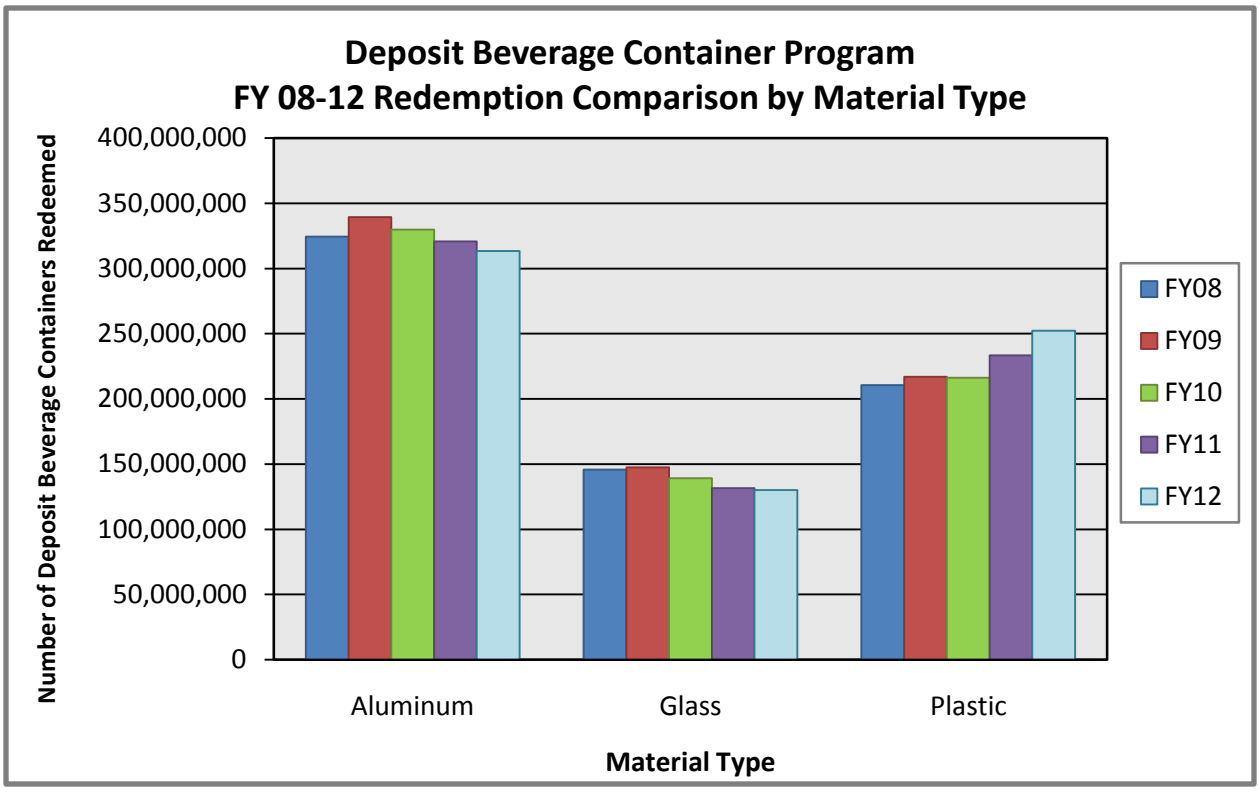


CHART 2: Comparison of Redeemed & Unredeemed

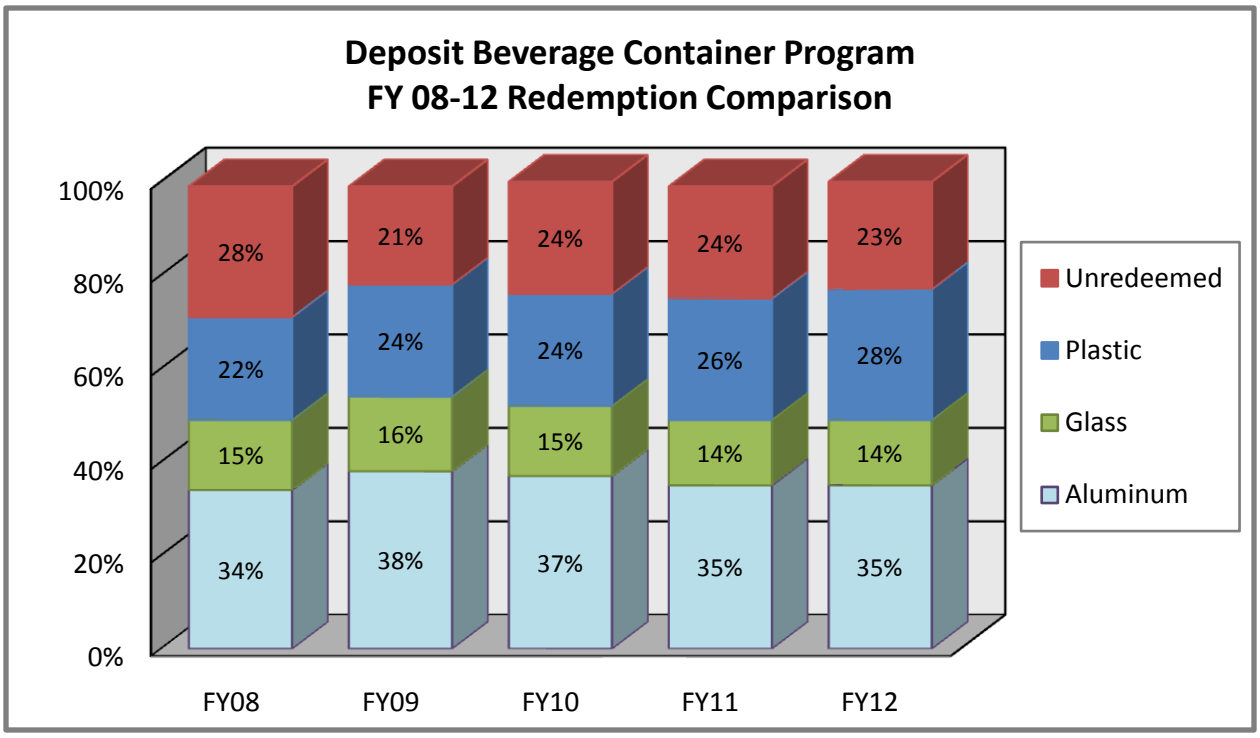
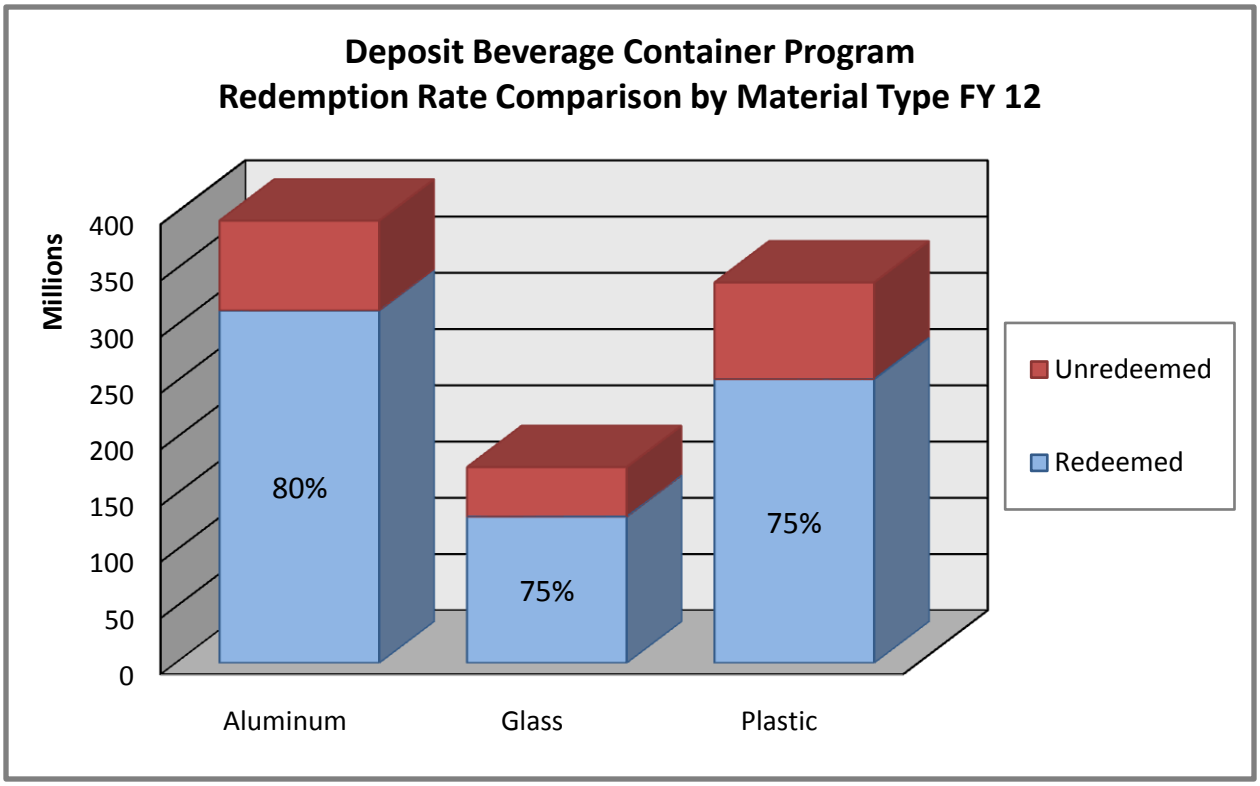


CHART 3: DBC Redeemed by Material Type during FY 2011-12



Deposit Beverage Container Program Special Fund
During FY 2011-12 the department collected approximately $54.6 million in container fees and deposits from distributors. It paid out nearly $54.7 million to redemption center operators for redeemed deposits and eligible handling fees. The department paid approximately $4.8 million for program administration and contracted activities. As of June 30, 2012, the DBC special fund contained approximately $4.2 million after encumbrances.

Based on a monthly transaction range of $3 to 4 million the program prefers to maintain a minimum fund balance of $4 million so that sufficient funds are available to assure continuous operations. This has become problematic in the past few years as high redemption rates and various legislative actions have eroded the fund balance.

The low DBC special fund balance forced the department to raise the container fee from 1 cent to 1 1/2 cents per container on September 1, 2012. The program is designed to operate on reserve funds from unredeemed deposits. Since the amount of unredeemed deposits decreases as the redemption rate increases the payments made on redeemed containers currently exceeds collections on newly sold containers. As a result, the statute allows the department to increase the container fee when the redemption rate exceeds 70%. Although the redemption rate reached this level in 2008 the department deferred the increase in the previous 4 years in choosing to operate the program on its (then adequate) reserve funds.

The department would have been able to avoid increasing the container fee for several more years despite the high redemption rate were it not for additional drains on its funds in the recent past. Fund transfers, the loss of the fund's interest income, and the loss of the exemption for the Department of Accounting and General Services central services fee has decreased the fund by nearly $10 million since 2009. The loss of interest income and exemption from the central services fee are especially damaging and it is an ongoing drain on the program's fund.

TABLE 3: DBC Revenues & Expenditures FY 2011-12

Revenue		
Distributor Payments		
Deposits (5¢ per container)	$ 45,564,160	
Container Fees (1¢ per container)	$ 9,112,843	
Dividend & others – refund/reimb	$ 345	
	Total Revenue	**$ 54,677,348**
Expenditures		
Payments to Redemption Centers		
Deposits (5¢ per container)	$ 36,192,370	
Handling Fees (2-4¢ per container)*	$ 18,563,081	
Subtotal	$ 54,755,451	
County Contracts	$ 812,243	
Reimbursement for Lanai, Maui to operate a Certified Redemption Center	$ 80,467	
Administrative Expenses		
DOH Payroll	$ 514,019	
DOH supplies, phone, misc.	$ 55,407	
Advertising/Outreach	$ 18,851	
Payment to General Fund for Admin & Central Services FY11 FY12	$ 1,032,330 $ 2,233,496	
Recycler(s) Audit Fee	$ 108,513	
Others - Travel	$ 15,248	
Subtotal	$ 4,870,574	
	Total Expenditures	**$ 59,626,025**

** Handling fees for aluminum, bi-metal, and plastic are 2¢ for Oahu and 3¢ for neighbor islands. Fees for glass are 2¢ for agriculture/construction and 4¢ for remanufacturing uses for all islands.*

Certified Redemption Centers

117 certified redemption centers (CRCs) were open to the public as of June 30, 2012. This was a net increase of 11 CRCs from the previous year; five on Oahu, four on Maui, and one each on Hawaii and Kauai.

DBC Inspections & Enforcement

Inspections

Program inspectors conducted 134 compliance evaluation inspections (CEIs) of regulated entities which included certified redemption centers, recycling facilities, and retailers. Inspections are either program initiated or in response to complaints.

Enforcement

The program issued 51 warning letters to distributors, CRCs and retailers during FY 2011-12. It also issued five enforcement notices and orders, which are a more formal and involved enforcement tool utilized when serious violations are involved.

Segregated Rates

Segregated rates are offered by CRCs to give consumers the quicker option of redeeming their containers by weighing instead of hand counting. The rates are set by the department and indicate the average number of deposit containers per pound when the containers are segregated by material type. Consumers have a choice to redeem their containers by either weight or hand count. CRCs must provide a hand count of loads of 200 or less containers if requested by the customer.

The department periodically evaluates deposit beverage container weights and updates the rates accordingly to reflect trends in container packaging. The segregated rates were last updated in December 2010. The current rates are shown in Table 4.

TABLE 4: Segregated Rates

Material Type	# Containers per lb.	Refund Amount per lb.
Aluminum	32	$1.60
Bi-metal	5.9	$0.295
Glass	2.4	$0.12
Plastic (17 fl. oz. or less)	26.3	$1.315
Plastic (mixed sizes)	18.8	$0.94

Electronic Waste and Television Recycling and Recovery Program
Electronics Recycling Program Background

The Electronic Waste Recycling Act was adopted in 2008 and created a recycling program for computers, portable computers, computer monitors and computer printers. Products covered by this portion of statute are considered "Covered Electronic Device" (CEDs). The Electronic Waste and Television Recycling and Recovery Act was adopted in 2009 and expanded the program to cover televisions. Products covered under this portion of the law are termed "Covered Televisions" (CTVs). The dual program is managed by the Office of Solid Waste Management (OSWM).

The law requires manufacturers to register with DOH and submit recycling plans to the department. The plans describe how each manufacturer intends to collect and recycle used CED and CTV products. Table 5 indicates the number of manufacturers registered with the department by year.

Table 5: Number of Registered Manufacturers

FY	09	10	11	12
CED	75	5	44	50
CTV	1	25	29	28

Manufacturer Ranking by Pounds Recycled in 2011

By January 1, 2010, CED manufacturers were required to have their recycling programs established for Hawaii and by January 1, 2011, CTV manufacturers were required to have their recycling programs established.

By law, the Department of Health is required to rank CED manufacturers by the number of pounds they recycled. Table 6 displays the rankings for the manufacturers who reported recycling CEDs in Hawaii. There were 24 CED manufacturers who reported recycling zero (0) pounds of CEDs in Hawaii, these manufacturers are listed alphabetically in Table 7.

Table 6: Manufacturer Ranking by CED Pounds Recycled in 2011

Rank	Manufacturer Name	CED Pounds Recycled
1	Apple Inc	729,109
2	Samsung Electronics	555,731
3	Hewlett-Packard (HP)	500,222
4	Ricoh Americas Corporation	138,584
5	LG Electronics USA, Inc.	113,828
6	Best Buy	108,707
7	VIZIO Inc.	55,144
8	Panasonic Corporation of North America	49,168
9	Funai Corporation	48,266
10	Sony Electronics, Inc.	40,000
11	Toshiba America Information Systems, Inc.	25,267
12	Mitsubishi Digital Electronics America	24,458
13	Sharp Electronics Corp	23,794
14	Sanyo	22,348
15	Acer America Corporation	18,887
16	Wyse Technology	10,008
17	Orion	7,128
18	Lexmark	5,261
19	NEC Display Solutions of America, Inc.	3,500
20	Dell Products L.P.	3,120
21	Brother International	2,583
22	Oracle	2,339
23	Hitachi Home Electronics (America), Inc.	1,418
24	Imation	1,138
25	Philips Consumer Lifestyle	1,090
26	Oki Data Americas, Inc.	1,000
27	JVC America	920
28	PLR IP Holdings, LLC (Polaroid)	696
29	ViewSonic Corporation	500
30	International Business Machines Corporation	165
31	RadioShack	105

Table 7: CED Manufacturers Reporting Zero Pounds Recycled for 2011

ASUS Computer International
Barnes & Noble
BenQ America Corp.
Canon USA, Inc.
Cisco
Coby Electronics Corp.
Creative Labs, Inc.
Cyberpower Inc.
Eastman Kodak Company
Envision Peripherals, Inc.
Epson American, Inc.
Fujitsu America Inc
Hannspree North America, Inc.
Kobo Inc
Konica Minolta Business Solutions U.S.A., Inc.
Kyocera Mita America, Inc.
Lenovo (United States) Inc.
Motorola Mobility, Inc
Motorola Solutions
NCR Corporation
Planar Systems, Inc.
Research In Motion Limited
Wacom Technology Corp
Xerox Corporation

For 2011, CED and CTV manufacturers reported recycling 2,494,484 pounds of CEDs and 1,011,631 pounds of CTVs. For 2010, when only CED manufacturers were required to have recycling programs and it was reported that 3,235,432 pounds of e-waste was recycled. The 2010 amount included other types of e-waste (TVs, keyboards, mice, etc.) in addition to CEDs. Overall, there was an increase of 270,683 pounds (8.37%) of e-waste recycled from 2010 to 2011 (Table 8).

Table 8: E-waste Recycled in 2010 and 2011

	Pounds Recycled	
	2010	**2011**
CED Manufacturers	3,235,432	2,494,484
CTV Manufacturers		1,011,631
Total	**3,235,432**	**3,506,115**

Registered electronic device manufacturers are required to pay an annual registration fee of $5,000 while registered television manufacturers are required to pay an annual $2,500 registration fee. Any manufacturer that produces both CEDs and CTVs are required to pay a combined $7,500 in annual registration fees. Table 9 indicates program revenue from manufacturer registration fees.

Table 9: Electronic Device Recycling Fund Revenue

FY	09	10	11	12
	$377,500	$87,500	$307,464	$320,000

Electronics Recycling Program Concerns and Challenges

Convenience and Effectiveness of Manufacturer Recycling Programs

In an attempt to strike a balance between oppressive mandates and flexibility, the law gives manufacturers considerable leeway in the types of recycling programs they offer consumers. The law requires each manufacturer to submit their recycling plans to the department. The plans need to describe collection and recycling procedures. While the law requires the department to review plans it does not provide any criteria or performance standards by which to evaluate the plans.

This allows some manufacturers to implement inconvenient programs that require consumers to do much of the work to recycle their used electronic devices or televisions. The department is concerned that inconvenient programs discourage consumers and limit recycling. Some examples of inconvenient programs include:

- Mail-back programs that require customers to package CEDs for mailing. This is impractical for large items such as TVs, especially if consumers are required to supply their own boxes/packaging.
- Drop-off programs with inadequate statewide coverage. Neighbor island coverage in many of the programs is limited or non-existent.
- Drop-off programs with inconvenient hours of operation.

Evidence from other states' electronic recycling programs suggests that mail-back programs result in minimal amounts of material being recycled, while programs with generous take-back requirements and convenient hours are the most successful.

Lessons Learned / Moving Forward

Counties have made diversion of electronic waste from landfilling (or incineration) a high priority and had developed programs prior to adoption of the state law. However, most of the collection programs have been drastically scaled back or completely eliminated in the past because of budget constraints.

New electronics recycling services for the general public have become available in response to the law. The most comprehensive programs have been centered on Oahu with recyclers accepting all brands of electronics free of charge and even accepting items not covered by the law. Neighbor Island services are still limited to mail-back programs that are inconvenient to the public.

Comprehensive services are centered on Oahu because of its population concentration. The department is providing FY 2012-13 funding to Hawaii, Maui and Kauai counties to maintain existing

county operated electronics recycling programs. While it is clear that this is the responsibility of CED/CTV manufacturers under the intent of the current law the department has determined that the short term need to divert these materials from disposal is of primary importance.

Since passage of the law it has become clear that statutory mandates for both minimum recycling goals and customer convenience are necessary to foster a more effective and convenient statewide electronics recycling system. Some manufacturers put no effort into establishing useful recycling programs, as evidenced by the reporting of zero pounds of recycled material. While other manufacturers, who choose to implement Oahu centric programs have demonstrated that they will not extend comprehensive services to the neighbor islands

The department supported a bill during the 2011 legislative session that contained provisions covering these two program areas; however the billed stalled in subject matter committee and did not pass into law. The department will continue to work with the legislature to try to strengthen the program with respect to consumer convenience.

2012 Legislative Session

The department introduced a bill that proposed to expand the existing program to include all electrically powered devices and also require manufacturers to implement comprehensive and convenient recycling programs. In considering the bill, the legislature mandated the department to assemble a task force to examine the issue.

The department assembled the task force and has held several meetings. It intends on introducing a bill as part of the Governor's administrative package for the 2013 legislative session that takes into account input received from the task force. A report on the task force's activities is being submitted to the legislature under separate cover.

Glass Advance Disposal Fee (ADF) Program

The OSWM continues to administer a statewide glass recovery program that is funded by an advance disposal fee (ADF). The department collects the fee from importers of products contained in glass containers (that are not deposit beverage containers). The department then contracts with each county to establish glass buy-back programs that divert glass from the waste stream towards recycling. As directed by statute, HRS §342G-84, the funds are distributed to the counties based on de facto population. Each county is allowed enough flexibility to structure its glass-recycling program to maximize recycling of the glass. Program revenue and expenditures are indicated in Tables 10 and 11 respectively.

The Glass ADF Program has been significantly affected by implementation of the DBC Program. Beginning October 1, 2004, glass deposit beverage containers were transferred from the ADF Program to the DBC Program. This reduced the number of containers covered by the ADF Program by approximately 80%, and resulted in a corresponding decrease in revenue. For most of its existence, the ADF Program has focused on commercial glass recycling. A more recent development has seen some DBC redemption centers starting to collect, and pay for ADF glass containers under ADF funding. This has increased the amount of glass being recycled and significantly increased the drawdown of ADF funds. Recycled glass tonnages are shown in Table 12.

The decrease of containers covered by the ADF Program is also reflected in the decreased amount of glass collected through each county operated buy-back program. The department has reduced the amounts of each of the county contracts in accordance with the decrease in Program revenue.

Table 10: Glass ADF Revenue

FY	08	09	10	11	12
	$622,215	$731,115	$701,607	$761,535	$767,375

Table 11: Expenditures for County Collection Programs

FY	08	09	10	11	12
Hawaii	$832,580	$59,390	$0**	$150,000	*
Maui	$150,640	$57,205		$145,000	$141,600
Oahu	$67,740	$295,205		$745,000	*
Kauai	$151,650	$24,890		$40,176	$32,043
Total	$1,202,610	$436,690		$1,121,097	$173,643

** Not available at the time of this report*

*** Funding was not provided to the counties in FY 2010 because the Glass Advance Disposal Fee special fund was identified as a potential source to cover general fund shortfalls.*

Table 12: County Recycled Glass Tonnages

FY	08	09	10	11	12
Hawaii	433	371	0*	1,145	**
Maui	1,000	1,564		2,095	1,809
Oahu	2,154	2,139		5,993	0**
Kauai	0	259		243	277
Total	3,587	4,333		9,476	2,086

* *The Glass Advance Disposal Fee special fund was identified as a potential source to cover general fund shortfalls, so funding was not provided to the counties in FY 2009-10 and to the City & County of Honolulu for FY 2011-12. Therefore, tonnage reports were not required of the counties during FY 2009-10 or the City & County of Honolulu for FY 2011-12.*

*** Not available at the time of this report*

Construction & Demolition Waste Minimization and Diversion Outreach

The OSWM continues to provide compliance assistance to Hawaii's construction industry, which is comprised of general contractors, subcontractors, builders, developers and other interested parties. The purpose is to promote recycling practices and compliance with State illegal dumping laws established in Chapters 342G and 342H, HRS, and Chapter 11-58.1, HAR, "Solid Waste Management Control." The OSWM conducts compliance assistance through presentations at industry-led events (e.g. General Contractors Association of Hawaii meetings).

County Solid Waste Management Planning Activity

Statute requires that each county develop and maintain an integrated solid waste management (ISWM) plan. Counties are required to revise their ISWM plan every ten years. Statute requires each county to assemble an advisory committee as part of its revision process. The OSWM has been represented on the advisory committee for each of the revisions to the county plans thus far conducted. All county ISWM plans are currently in compliance with the revision requirements.

State Solid Waste Management Planning Activity

Statute requires that the department revise the state's ISWM plan within two years of the counties completing revision of their respective plans. The department has not revised the state plan due to a lack of funds (as discussed in below). The department anticipates a minimum cost of $200,000 for a comprehensive revision of the state plan.

Environmentally-Preferable Purchasing

Pursuant to Section 342G-43, HRS and Governor's Administrative Directive No. 06-01, the OSWM collects annual progress information from state and county agencies on quantities of recycled content products purchased vs. non-recycled content products. Annual results are reported to the DBEDT State Energy Office for inclusion in the Lead-By-Example report.

Landfill Operations

Pursuant to Section 342G-63(b)(3), HRS, the OSWM also offers compliance assistance training

events to landfill operators. Training events are scheduled and coordinated upon request by county municipal solid waste managers.

IV. SOLID WASTE MANAGEMENT PROGRAM FUNDING

Solid Waste Management Disposal Surcharge
The Solid Waste Management Disposal Surcharge is the primary funding source for the Solid Waste Section (SWS) and a portion of the OSWM, providing partial funding for the Solid Waste Coordinator and Recycling Coordinator.

The department collects the Surcharge from the owners/operators of disposal facilities operating within the state. This includes all municipal solid waste and construction and demolition landfills, as well as the H-Power waste-to-energy incinerator on Oahu. Surcharge revenue is deposited in the Environmental Management Special Fund.

Originally proposed at 75¢ per ton in early discussions, the Surcharge was initially set, in statute (HRS §342G-62), at 25¢ per ton in 1993 and raised to 35¢ per ton in 1997. As indicated in Table 13, Surcharge revenue has decreased by about 15% over the last two years. While the economy is believed to have affected the reduction of waste generation rates, the reduction can also be attributed to the increase in waste diversion. Revenue is expected to decline further in the future due to increasing waste diversion activities. The Program has recently permitted recycling and non-incineration waste to energy facilities.

The disposal surcharge is a common funding mechanism for solid waste management programs across the country. Past research has indicated that seventeen states utilize disposal surcharges to fund solid waste management functions; with an average of $1.43 per ton, and a high of $3.00 and a low of $0.35 per ton. Hawaii's Surcharge is small when landfill tipping fees are taken into account. For example, Hawaii's 35 cents per ton represents less than one percent of the approximately $90 per ton tipping fee charged at the City and County of Honolulu's Waimanalo Gulch Landfill. The following is a summary of each county's landfill tipping fees and associated charges.

Hawaii County	$85.00 per ton
Maui County	$53.00 per ton + $10.00 recycling surcharge = $63.00 per ton total cost
C&C of Honolulu	$81.00 per ton + 12% recycling surcharge = $90.72 per ton total cost
Kauai County	$56.00 per ton

Table 13: Solid Waste Disposal Surcharge Revenue

FY	08	09	10	11	12
	$564,934	$537,862	$476,990	$305,760	$448,482

Increasing Costs
Program expenses currently exceed $600,000 annually, and projections are that costs will continue to increase due mostly to rising salary and benefit costs. The SWS and OSWM have been able to maintain positions and operations by utilizing cost savings incurred through position vacancies. However, due to the recent elimination of general-funded staff positions, including two within the

SWS, vacancies in OSWM have been filled through the reduction-in-force process and personnel levels in both programs have reached maximum position counts.

The SWS staff of three FTE engineers and three environmental health specialists annually handle approximately 300 permitted facilities; 100 to 200 permit applications; 150 to 200 solid waste complaints; illegal dumping sites; and numerous miscellaneous inquiries annually. Additionally, the revenue situation keeps the OSWM from undertaking other activities stipulated in statute, which include waste reduction, recycling, and market development.

Decreasing Revenue
In addition to rising costs, the Program has faced elimination of two general-funded positions as well as decreasing Tip Fee Surcharge revenue due to decreased disposal tonnages at landfills and the H-Power facility, and increased waste diversion. The decreased disposal tonnages are directly linked to economic slowdown. Tip Fee Surcharge revenue has decreased 20% since FY 2007-08. Additional decreases are anticipated based on the proposed operations of additional recycling and waste to energy facilities.

While the amount of waste disposed in Hawaii has decreased; the workload carried by the SWS and OSWM to regulate solid waste facilities remains at a high level as the number of regulated facilities has remained relatively unchanged.

Unlike other regulatory programs within the department, the SWS receives no federal funding, which leaves it nearly entirely dependent on Surcharge revenue.

2011 & 2012 Legislative Sessions
During the 2011 legislative session, the department supported a bill that proposed an increase to the tip fee surcharge. The department participated in a series of meetings, organized by the Senate's committee on Energy and Environment that included representatives of the state, City & County of Honolulu, PVT Landfill, and Honua Energy. The meetings focused on the program's revenue needs and resulted in a compromise proposal of a tiered surcharge that would enhance program revenue. The compromise was proposed as a conference draft of SB 725 but stalled in conference committee. Efforts to revive the proposal in the 2012 session were unsuccessful.

The department is again including a proposal to increase the disposal surcharge in the Governor's 2013 administrative package. The proposal is identical to the compromise proposal forged during the 2011 session. The department feels that this particular proposal provides the best starting point for discussions because it was an agreement arrived at through discussions with multiple stakeholders.

V. Clean Energy and Solid Waste Management

Increasing energy costs and Hawaii's dependence on fossil fuels has increased the focus on developing local renewable energy sources. The Hawaii Clean Energy Initiative seeks to have 70% of Hawaii's energy come from renewable sources by 2030, and landfill methane is a potential energy source to replace some fossil fuel use.

These efforts will likely affect the way we consider future waste management technologies. As an example, the City and County of Honolulu classifies the H-Power Waste to Energy facility as a recycling activity. The City estimates that 65% of Oahu's waste is recycled by including waste to energy use with traditional recycling. With the construction of H-Power's third boiler that was completed in 2012, we expect the City's recycling numbers to increase. Although we support the development of alternative energy sources, the state solid waste laws (Hawaii Revised Statutes, Ch. 342G) define incineration as waste disposal and not recycling and therefore DOH cannot concur with the City's position that incineration is a form of recycling.

In addition, in considering the hierarchy of solid waste management practices and the definition of recycling, there is an opposing view in that if incineration (or waste to energy) is considered recycling there will be less of an incentive to retrieve recyclable materials for the creation of new products and instead they will be utilized solely for their energy value. Because of our distance to markets and fuel sources, typical discussions heard on the national level may not be appropriate locally. Therefore, such evaluations should be conducted in the next state ISWM plan, pending available funding.

These emerging issues are of serious importance to both the SWS and OSWM, as they may lead to a redefinition of traditional solid waste management approaches. The collective staff of both programs actively monitors these issues, tracking national and international discussions, and studying how new concepts may be incorporated into both planning and permitting processes.