

Status Report on Reducing and/or Continuing the Use of  
Waimanalo Gulch Sanitary Landfill (WGSL)  
Public Hearing  
April 16, 2012  
5:00 p.m.  
City Hall, 530 South King Street,  
Room 301, Mayor's Conference Room

Presentation

1. Opening and Welcome

Notice of this public hearing was published in the Honolulu Star Advertiser on April 2, 2012, and on the City's Refuse Division website, [www.opala.org](http://www.opala.org)

This public hearing is being held to comply with Conditions 15 and 16 of the State of Hawai'i Land Use Commission's FINDINGS OF FACT, CONCLUSIONS OF LAW, AND DECISION AND ORDER WITH MODIFICATIONS, certified on October 22, 2009, in Docket No. SP09-403 (the LUC Order), which states:

"15. The Honolulu City Council through the City Administration shall report to the public every three months on the efforts of the City Council and the City Administration in regard to the continued use of the WGSL, including any funding arrangements that are being considered by the City Council and the City Administration."

"16. The City Council and the City Administration shall have a public hearing every three months to report on the status of their efforts to either reduce or continue the use of the WGSL."

The complete LUC Order is available at the State Land Use Commission website: [http://luc.state.hi.us/co\\_sphonolulu.htm](http://luc.state.hi.us/co_sphonolulu.htm)

The following report covers developments during the last calendar quarter regarding the matters set forth in Conditions 15 and 16 of the LUC Order.

2. Progress Toward Another Landfill Site

A. Condition 4 of the LUC Order states in relevant part:

"On or before November 1, 2010, the Applicant shall begin to identify and develop one or more new landfill sites that shall either replace or supplement the WGSL."

The Mayor's Advisory Landfill Site Selection Committee has had nine meetings to date. The next meeting is planned for late April 2012. The process is taking longer than anticipated due to the diligence of the committee in wanting to investigate possible sites on federal lands and

other locations which were not previously considered (e.g., locations interior of the Pass-no-pass-line and the Underground Injection Control line).

- B. The following tonnage chart includes municipal solid waste (MSW), H-POWER ash and residue delivered to WGSL during the last three months. There were several H-POWER maintenance diversions during the first quarter of 2012, including 10 days in January, one day in February, and three days in March, resulting in an increased amount of MSW delivered to WGSL.

January 2012	34,422 tons
February 2012	24,637 tons
March 2012	25,356 tons

There were no complaints received during this period.

### 3. Progress Report on Landfill Diversion

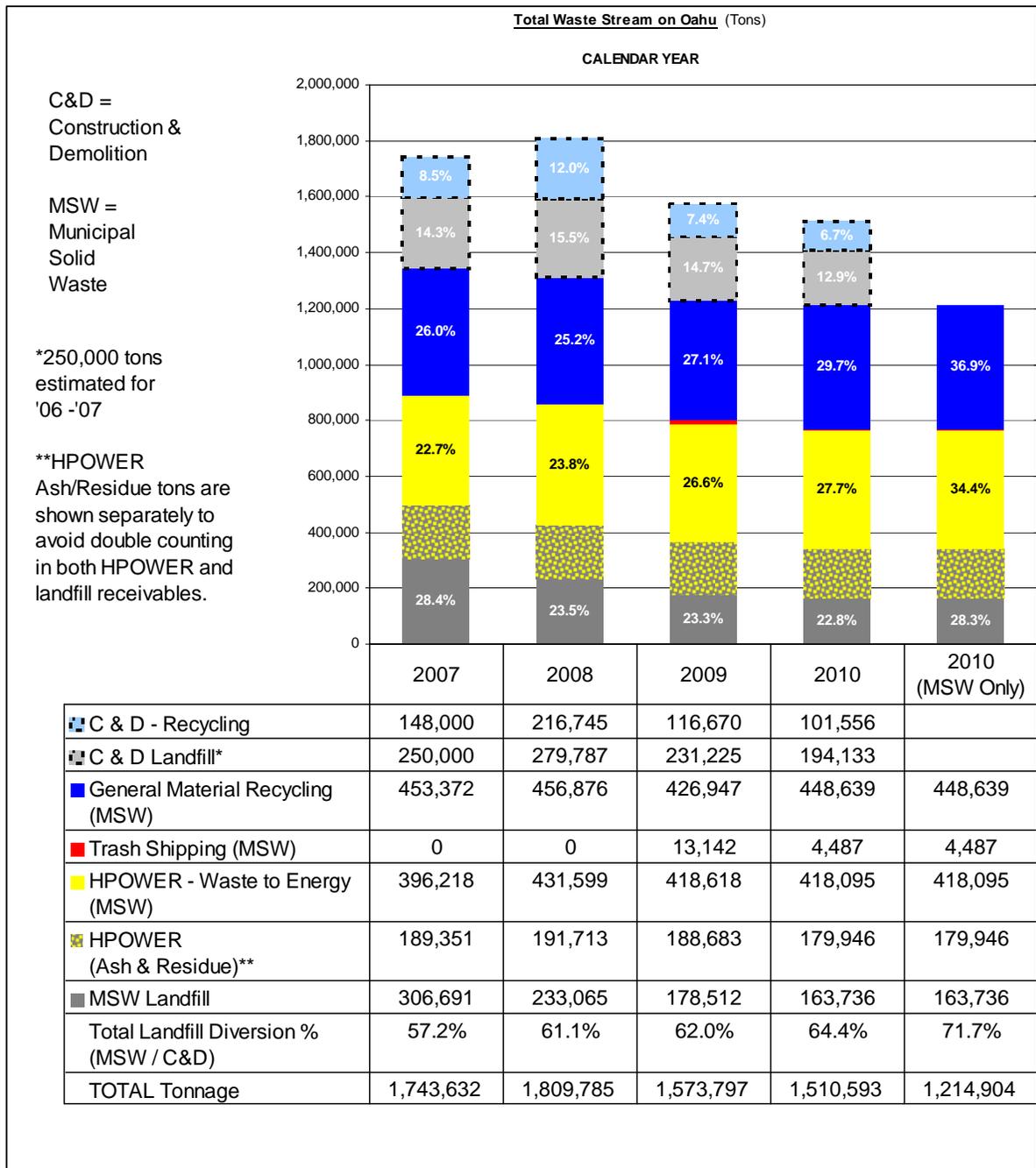
- A. The H-POWER expansion project is approximately 95% completed and is on schedule.
- B. Interim Off-Island Shipping of MSW

No waste was ever shipped to the mainland due to various problems encountered by Hawaiian Waste Systems (HWS), the bidder awarded the contract to ship waste to the mainland. HWS had 20,000 tons of MSW to be disposed of. A fire at HWS facility of January 6, 2011, temporarily delayed disposal. However, by May 12, 2011, all of the stored waste was disposed of. Approximately 14,800 tons was taken to H-POWER, 4,500 tons was taken to WGSL, and 1,500 tons of metal was recycled. On June 8, 2011, HWS began accepting City waste (that would have gone to the landfill) to be shredded and recycled. The burnable materials are taken to H-POWER for energy conversion and the metals and other recyclables are taken to recyclers. The City has a contract for HWS to take 36,000 tons over a 12 month period.

As of March 31, 2011, approximately 22,600 tons of waste has been diverted to HWS for processing.

### C. Materials Recycling and Landfill Diversion

To present a complete waste flow picture, the most recent available data is for calendar year 2010. Although waste tracking to landfill and H-POWER is managed every month by ENV, recycling data is provided by commercial recycling companies which are surveyed annually. Recycling data for 2011 is being gathered and compiled during the first quarter of 2012, and an updated chart and analysis will be posted online at [www.opala.org](http://www.opala.org) mid year.



The data in the chart above presents the annual quantity of waste (in tons) that is processed through recycling, waste-to-energy or landfilling for the most recent four (4) calendar years (2007–2010).

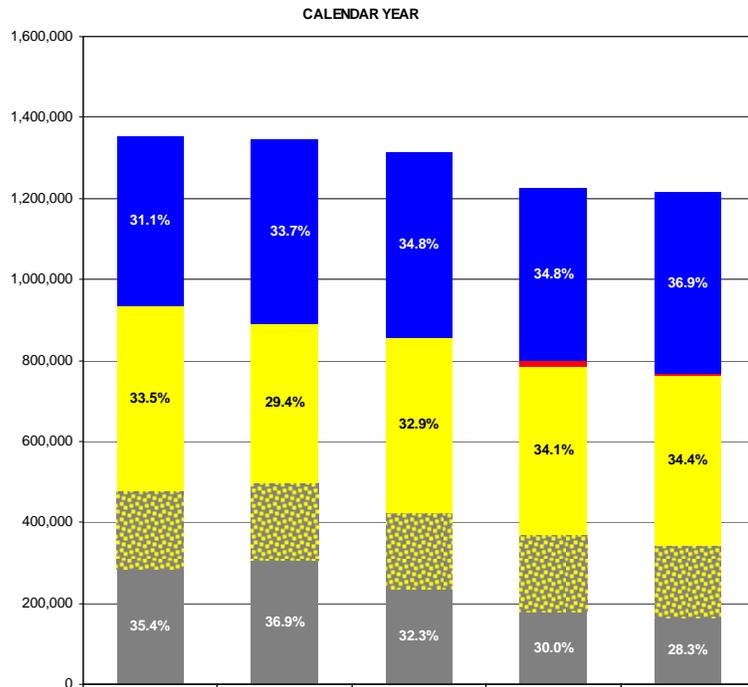
*Brief analysis:* The data shows how Oahu's waste has been diverted from landfill through recycling and waste-to-energy. The general trend shows annual increases in recycling and waste-to-energy, and decreases in landfill disposal. In comparing the most recent years, 2008 to 2010, note that overall waste generation decreased significantly, most likely due to the down-turn in the economy. Total waste generation dropped from 1.8 million tons in 2008 to 1.5 million tons in 2010. Although recycling tonnages appear to remain somewhat flat, the recycling rates, or percentage of the total waste stream, has increased proportionally. The general material recycling rate (shown in the darker blue) increased from 25 percent (2008) to 27 percent (2009) and to almost 30 percent (2010). The total landfill diversion rate continued to increase from 57 percent (2006/2007) to 62 percent (2009) and to 64 percent (2010), with continued reductions of waste disposed in landfill.

Total waste includes all waste of all types disposed/recycled on Oahu, including construction and demolition waste. There are two landfills on Oahu: the City's Waimanalo Gulch Sanitary Landfill (WGSL), which is designated for MSW, and the private PVT Landfill, which is permitted for construction and demolition waste only. When analyzing municipal solid waste (MSW) only and landfill diversion specific to the WGSL, the landfill diversion rate achieved through recycling and waste-to-energy is almost 72% and the general material recycling rate is 37%. See the far right column in the chart above. For a fuller comparison of diversion rates for WGSL over the most recent five (5) years, see the chart below.

**Municipal Solid Waste Stream on Oahu (Tons)**

MSW =  
Municipal  
Solid  
Waste

\*HPOWER  
Ash/Residue tons are  
shown separately to  
avoid double counting  
in both HPOWER and  
landfill receivables.



	2006	2007	2008	2009	2010
■ General Material Recycling (MSW)	421,072	453,372	456,876	426,947	448,639
■ Trash Shipping (MSW)	0	0	0	13,142	4,487
■ HPOWER - Waste to Energy (MSW)	454,068	396,218	431,599	418,618	418,095
■ HPOWER (Ash & Residue)*	191,800	189,351	191,713	188,683	179,946
■ MSW Landfill	286,842	306,691	233,065	178,512	163,736
Total Landfill Diversion % (MSW)	64.6%	63.1%	67.7%	70.0%	71.7%
TOTAL Tonnage (MSW)	1,353,782	1,345,632	1,313,253	1,225,902	1,214,904

*Recycling data:* The tables below provide detail of what was recycled by material type. The City has gathered annual recycling data since 1988 (except for 1989 and 1990). Note the upward trend of general material recycling from approximately 75,000 tons in 1988 to well over 400,000 tons today. Recycling of construction and demolition materials, such as concrete, rock and asphalt, has added between 100,000 to 200,000 tons to the recycling rates. These C&D recycling rates tend to fluctuate based on the volume and type of construction projects undertaken from year to year.

<b>Year</b>	<b>General Material Recycling</b>	<b>C&amp;D Recycling</b>	<b>Total Recycled</b>
<a href="#">2010</a>	448,639	101,556	550,195
<a href="#">2009</a>	426,947	116,670	543,617
<a href="#">2008</a>	456,876	216,745	673,621
<a href="#">2007</a>	453,282	148,952	602,234
<a href="#">2006</a>	421,072	121,675	542,747
<a href="#">2005</a>	417,669	193,829	611,498
<a href="#">2004</a>	386,338	173,916	560,254
<a href="#">2003</a>	366,639	106,773	473,412
<a href="#">2002</a>	352,699	139,055	491,754
<a href="#">2001</a>	367,300	114,070	481,370
<a href="#">2000</a>	327,710	165,000	492,710
<a href="#">1999</a>	314,075	225,200	539,275
<a href="#">1998</a>	318,690	148,800	467,490
<a href="#">1997</a>	313,394	204,400	517,794
<a href="#">1996</a>	299,574	95,300	394,874
<a href="#">1995</a>	294,340	44,400	338,740
<a href="#">1994</a>	290,412	35,700	326,112
<a href="#">1993</a>	241,600	30,000	271,600
<a href="#">1991</a>	167,152	0	167,152
<a href="#">1988</a>	73,992	0	73,992

**Oahu Recycling 2010**

<b>Material Type</b>	<b>Amount in tons</b>
<b>PAPER</b>	
Corrugated Cardboard	41,805
Newspaper	12,596
Office Paper	11,177
Other Paper	6,944
<b>METALS</b>	
Ferrous (includes autos)	163,166
Non-Ferrous (includes aluminum)	18,247
<b>GLASS</b>	22,833
<b>PLASTIC</b>	5,385
<b>TIRES</b>	9,518
<b>AUTO BATTERIES</b>	5,383
<b>ELECTRONIC SCRAP</b>	1,375
<b>GREEN WASTE (yard trimmings)</b>	91,413
<b>WOOD WASTE/PALLETS</b>	15,514
<b>CONSTRUCTION &amp; DEMOLITION (rock, concrete, asphalt)</b>	101,556
<b>FOOD WASTE</b>	26,677
<b>SEWAGE SLUDGE (Tonnage data being researched)</b>	-
<b>OTHER REUSE (Goodwill, Salvation Army)</b>	16,607
<b>TOTAL</b>	550,196

**Oahu Recycling 2009**

<b>Material Type</b>	<b>Amount in tons</b>
<b>PAPER</b>	
Corrugated Cardboard	41,945
Newspaper	15,053
Office Paper	14,224
Other Paper	1,043
<b>METALS</b>	
Ferrous (includes autos)	152,377
Non-Ferrous (includes aluminum)	13,626
<b>GLASS</b>	21,306
<b>PLASTIC</b>	4,876
<b>TIRES</b>	10,277
<b>AUTO BATTERIES</b>	5,929
<b>ELECTRONIC SCRAP</b>	664
<b>GREEN WASTE (yard trimmings)</b>	87,907
<b>WOOD WASTE/PALLETS</b>	16,185
<b>CONSTRUCTION &amp; DEMOLITION (rock, concrete, asphalt)</b>	116,670
<b>FOOD WASTE</b>	25,736
<b>SEWAGE SLUDGE (Tonnage data being researched)</b>	-
<b>OTHER REUSE (Goodwill, Salvation Army)</b>	15,777
<b>TOTAL</b>	543,617

The City's efforts to increase residential recycling have continued with the expansions of island-wide curbside recycling, community recycling bin program, condo recycling assistance programs and budget commitments to support these efforts. Additionally, the City requires commercial sector recycling through mandatory laws established by City ordinance, and provides assistance to businesses to setup and expand their recycling programs.

Curbside Recycling -- ENV completed the final phase expansion of the 3-cart curbside recycling program into the Leeward communities in May, 2010. There are currently 160,000 homes participating in the program, and capturing material at a rate of 20,000 tons of mixed recyclables and 50,000 tons of green waste per year. Based on the pilot program evaluations, the City projected 28,000 tons of mixed recyclables and 46,000 tons of green waste per year for the island-wide program, a net gain of 53,000 tons per year over pre-curbside recycling program activity. Having now completed one full year of island-wide recycling, the data shows that the program exceeded expectations for green waste and was just under projections for mixed recyclables. Increased public experience with identifying and sorting recyclables should produce higher results for the mixed recyclables as the program continues to mature. The program continues to be evaluated to identify strategies for improving participation and efficiencies.

Community Recycling Bins -- The City has maintained approximately 100 Community Recycling Bin sites on Oahu, but is currently phasing out this drop-off program in favor of more convenient recycling systems. The program started with 20 sites more than two decades ago and was expanded over the years as a mainstay of residential and school recycling. With the implementation of curbside recycling, recovery rates have decreased significantly in the bins. The service contract is scheduled to close end of June 2012, and the City is increasing efforts to further expand curbside recycling, develop recycling programs in condos, and assist schools in establishing campus recycling systems.

Condo Recycling -- The City continues to promote condominium recycling through a program that reimburses condominium properties for costs associated with the start-up of a recycling program.

Electronic Waste (e-waste) -- State law requiring manufacturers to provide take back programs for electronic waste went into effect January 1, 2010, and is administered by the State Department of Health (DOH). In general, the covered electronics included computers at the start in January 2010 and expand to include televisions in January 2011. City ENV will continue to work in collaboration with DOH and local e-waste recycling companies. DOH is looking for ways to strengthen the collection programs and proposed a bill to the 2012 State Legislature to establish an advance recycling fee (ARF) on electronic devices.

Business Recycling Programs -- The City continues to provide assistance to commercial sector recycling efforts and to ensure compliance with mandatory recycling policy established in the mid 1990's, which requires office buildings to recycle office paper,

bars/restaurants to recycle glass and a variety of food operations to recycle food waste. Disposal site bans/restrictions divert materials from landfill and H-POWER, including green waste, cardboard, metals, tires, auto batteries, e-waste. The City provides technical assistance to businesses for designing and implementing recycling programs through how-to guides, workshops and on-site support, and works collaboratively with the State's Green Business Program.

Public education regarding recycling is ongoing--distribution of brochures and print materials, opala.org website, WasteLine e-newsletter and annual events including Tour de Trash and Discover Recycling. In October 2009, ENV and Oceanic Time Warner Cable launched "Opalavision" on The Green Channel at Oceanic 332 and online at opala.org. Short stories about the City's recycling initiatives and programs are featured in 3-minute episodes that educate and entertain. New episodes are produced monthly with an archive of dozens to keep viewers entertained. The format is interactive, supporting 24/7 viewing of all episodes on demand. In April/May 2011, City ENV sponsored two educational shows for our youth – Honolulu Theatre for Youth production of "Where Do Things Go?" and a traveling show to local schools entitled "Sort It Out!" Both shows included distribution of Opala IQ Books and educational materials to students and teachers. A second season of recycling educational performances for the schools is underway, with shows presented by HTY during April/May 2012.

#### D. Solid Waste Integrated Management Plan

Funds are available to initiate the next update of the plan.

#### 4. Special Use Permit (SUP) Amendment

The current SUP dictates that WGS� stop accepting MSW for disposal as of July 31, 2012. As stated in Condition 14 of the SUP, "Municipal solid waste shall be allowed at the Waimanalo Gulch Sanitary Landfill up to July 31, 2012, provided that only ash and residue from H-POWER shall be allowed at the Waimanalo Gulch Sanitary Landfill after July 31, 2012." While some types of MSW may be disposed of at H-POWER, certain wastes such as sewage sludge, animal carcasses, and treated medical sharps cannot be disposed of at H-POWER. Moreover, because H-POWER's operating permit requires a permitted landfill as a back-up disposal option, it is conceivable that H-POWER will have to shut down if WGS� is required to stop accepting MSW.

On June 28, 2011, ENV filed a SUP Amendment Application with the City Department of Planning and Permitting, to delete Condition No. 14 of the SUP. This will allow WGS� to continue accepting municipal solid waste until the landfill reaches its capacity as permitted by the State Department of Health.

The City and County of Honolulu Planning Commission (Commission) convened a public hearing on October 5, 2011, to consider ENV's application to delete Condition No. 14 of the SUP. The Commission heard public testimonies and granted petitions to intervene in the SUP proceeding to Ko Olina Community Association, Maile Shimabukuro, and Schnitzer Steel Hawaii Corp. With the granting of the petitions to intervene, the matter proceeded as a contested case. A pre-hearing conference to discuss procedural and others matters in the contested case was held on October 12, 2011. A contested case hearing began on December 7, 2011, with opening statements given by ENV and intervenors. The contested case hearing continued on January 11, 25, February 8, March 7, 14, April 4 and 11, 2012. The last hearing is tentatively scheduled for April 17, 2012.

5. City Council Resolutions and Bills

<b>RESOLUTION NO.</b>	<b>DESCRIPTION</b>	<b>STATUS</b>
09-345	City administration immediately initiate site selection process for new landfill	Resolution deferred in committee 1/12/10 No change
09-346	City administration select new site to be used exclusively for disposal of H-POWER ash and residue	Resolution deferred in committee 1/12/10 No change
10-004	City auditor conduct an audit relating to delays in shipping City's municipal solid waste to mainland	Resolution filed 1/5/11.No change
10-111	City administration promote Freecycle Honolulu	Resolution filed 5/7/11. No change.
10-242	City administration conduct public education regarding proper disposal of bulky wastes	Resolution adopted 10/13/10.
11-055	City Council's continuing support for the shipment on an interim basis of solid waste.	Resolution filed 2/10/12.
11-100	City fast track permitting and approvals for new solid waste disposal and recycling facilities.	Resolution filed 3/31/12. Resolution deferred in committee 9/28/11.
11-260	City create and fund a solid waste technology liaison position.	No change.

BILL NO.	DESCRIPTION	STATUS
76 (2009)	Waimanalo Gulch Landfill close no later than July 31, 2012	Bill filed 10/21/11.
43 (2010)	Regulate use of non biodegradable plastic bags	Bill deferred in committee 11/09/10
44 (2010)	Require recycling or reuse of construction and demolition wastes	Bill deferred in committee 11/09/10
47 (2010), CD 1	Terminate recycling residue discount	Bill passed into law effective 5/31/11
36 (2011), CD1, FD1	Reinstates a discounted disposal fee for residue from recycling operations at 50% FY12, 35% FY13, 20% FY14.	Bill passed into law effective 7/1/11
10 (2012),CD 1	Regulate use of nonbiodegradable plastic bags and other bags provided to customers.	Reported out of committee for passage on 3 <sup>rd</sup> reading as amended 4/4/12.

All resolutions and bills, and video of Council meetings, can be found at the City website, [www.honolulu.gov](http://www.honolulu.gov)

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Public Questions and Comments:

- D: There were questions regarding the status of Bill 10 CD1 regarding plastic bags – it was clarified that the status remains the same but there is more work to be done on the Bill prior to passage.
- Q: What do we do with plastic “jewel” cases from CDs – are they recyclable?
- A: If they are not marked as recyclable then they are great burn material for H-Power
- C: Mahalo for providing us the requested information on what can not be burned at H-Power

Public attendees: Cynthia Rezentes, Alana Peacott Richards, Shannon Wood, Matthew Kain

City Attendees:

Department of Environmental Services  
 Manuel Lanuevo, Deputy Director  
 Silvestre Ulep, Acting Assistant Chief  
 Wayne Hamada, Disposal Branch Chief  
 Suzanne Jones, Recycling Branch Chief  
 Marcus Owens,

Other:

Joe Whelan, General Manager, Waste Management of Hawaii  
 DeeDee Letts, Resolutions Hawaii