

Status Report on Reducing and/or Continuing the Use of  
Waimanalo Gulch Sanitary Landfill (WGSL)  
Public Hearing  
April 18, 2011  
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 4, 2011 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 14 of the LUC Order states:

"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 four meetings. The next scheduled meeting is on May 12, 2011.

- B. The following tonnage chart includes municipal solid waste (MSW), H-POWER ash and residue delivered to WGSL during the last three months. There was an H-POWER maintenance diversion during March/April 2011, resulting in an increased amount of MSW delivered to WGSL.

January 2011	21,275 tons
February 2011	21,537 tons
March 2011	41,009 tons

### 3. Recent Discharge of MSW into Ocean

In December 2010, heavy rainfall and at least 2 large storm events caused WGSL to become inundated by flood waters from upcanyon of the landfill. The Palehua rain gauge is located just to the north of WGSL. Specifically, on December 19, 2010, the Palehua rain gauge preliminarily showed that the area above WGSL received about 7.9 inches of rain in 13 hours. On December 27, 2010, the Palehua rain gauge showed that the area above WGSL received an additional 3.9 inches of rain in 4 hours. On the night of January 12, 2001, there was a discharge of MSW, which included a very small amount of sterilized medical waste. On that night, the Palehua rain gauge showed that the area above the landfill received another 10.7 inches in 24 hours (and 7.6 inches in 6 hours).

WMH began construction of a storm water diversion structure shortly after receiving the necessary approvals in October 2009. This diversion channel was designed to convey storm water originating from the watershed above the landfill, around the western portion of the active landfill. The channel was not functional at the time of these storm events. The storm water diversion channel became functionally complete on February 15, 2011, and will now carry future storm water originating from up canyon around the active portion of the landfill.

All damages to landfill operations related to the referenced storm events have now been repaired, and the landfill has resumed normal operating hours.

### 4. Progress Report on Diversion

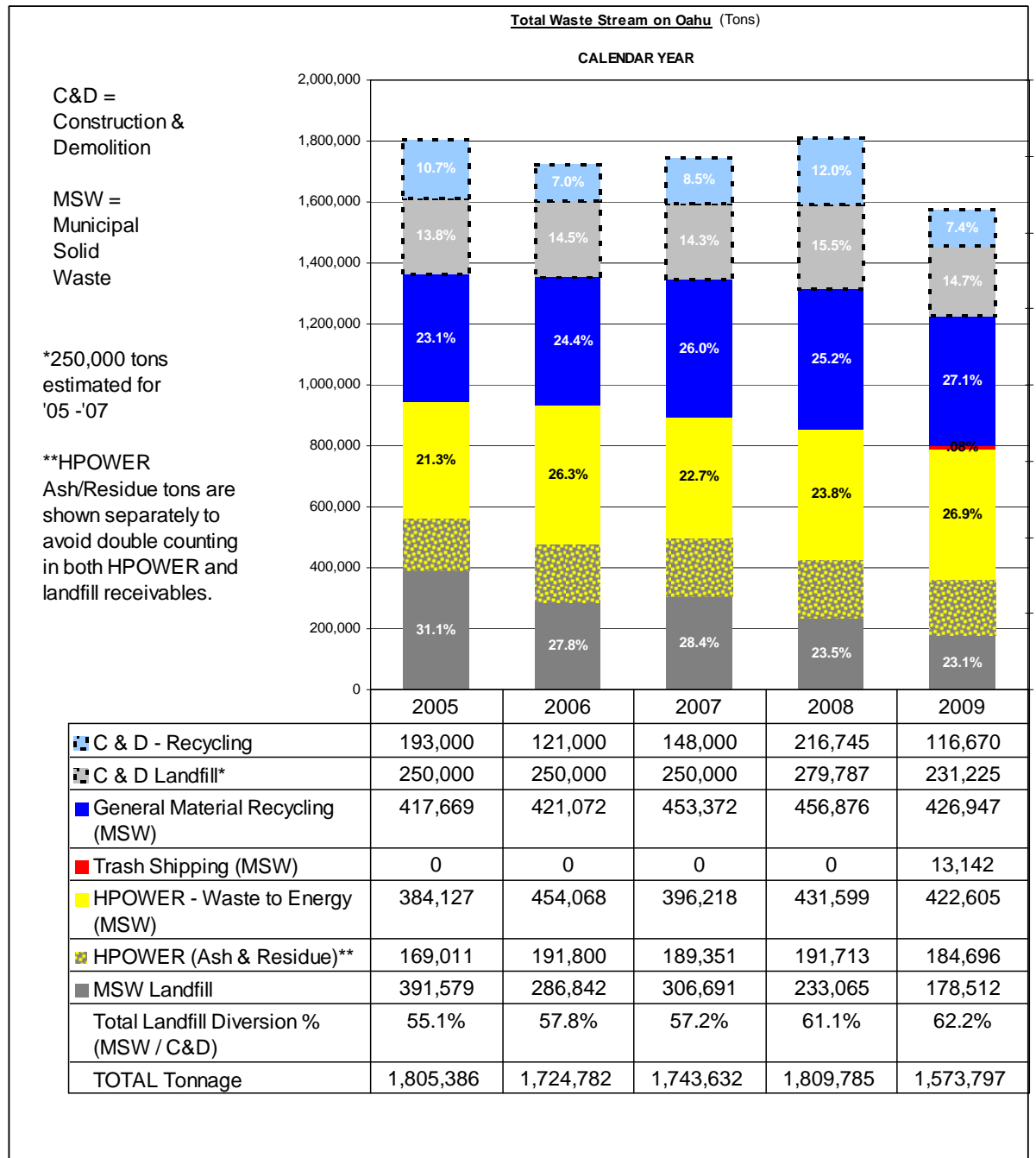
- A. The construction of the H-POWER expansion project is approximately 45% completed and is on schedule.

- 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, as of April 2011, approximately 13,600 tons have been disposed of at H-POWER and 2,400 tons have been disposed of at WGSL. HWS is working with the City to

continue disposal of the remaining approximately 4,000 tons of baled waste either at H-POWER or WGS.

### C. Materials Recycling and Landfill Diversion



The most recent data available is for calendar year 2009. 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 2010 is currently being gathered.

The data in the chart above 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 rates, and decreases in landfill disposal. In comparing the most recent years, 2008 and 2009, note that overall waste generation decreased significantly, likely due to the down-turn in the economy. Total waste generation dropped from 1.8 million tons in 2008 to 1.575 million tons in 2009. Although recycling tonnages decreased, the recycling rate, or percentage of the total waste stream, increased from 25% in 2008 to 27% in 2009 for general material recycling (not including C&D recycling). And the total landfill diversion rate continued to increase from 57% in 2006/2007 to 61% in 2008 and 62% in 2009. (National average is 44-46%)

The tables below provide detail of what was recycled per year and by material type. 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 and 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. C&D material is diverted from the WGSL to the private PVT landfill for disposal.

Year	General Material Recycling	C&D Recycling	Total Recycled
<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

<b>Oahu Recycling 2009</b>	
Material Type	Amount in tons
PAPER	
Corrugated Cardboard	41,945
Newspaper	15,053
Office Paper	14,224
Other Paper	1,043

METALS	
Ferrous (includes autos)	152,377
Non-Ferrous (includes aluminum)	13,626
GLASS	21,306
PLASTIC	4,876
TIRES	10,277
AUTO BATTERIES	5,929
ELECTRONIC SCRAP	664
GREEN WASTE (yard trimmings)	87,907
WOOD WASTE/PALLETS	16,185
CONSTRUCTION & DEMOLITION (rock, concrete, asphalt)	116,670
FOOD WASTE	25,736
SEWAGE SLUDGE (Tonnage data being researched)	-
OTHER REUSE (Goodwill, Salvation Army)	15,777
<b>TOTAL</b>	<b>543,617</b>

### Oahu Recycling 2008

Material Type	Amount in tons
PAPER	
Corrugated Cardboard	34,249
Newspaper	13,905
Office Paper	13,301
Other Paper	1,124
METALS	
Ferrous (includes autos)	165,943
Non-Ferrous (includes aluminum)	23,656
GLASS	25,050
PLASTIC	4,704
TIRES	10,200
AUTO BATTERIES	6,327
ELECTRONIC SCRAP	1,123
GREEN WASTE (yard trimmings)	95,941
WOOD WASTE/PALLETS	13,526
CONSTRUCTION & DEMOLITION (rock, concrete, asphalt)	216,745
FOOD WASTE	29,933
SEWAGE SLUDGE (Tonnage data being researched)	-
OTHER REUSE (Goodwill, Salvation Army)	15,831
<b>TOTAL</b>	<b>673,621</b>

The City's efforts to increase residential recycling have continued with the expansions of the islandwide curbside recycling program, community recycling bin program, condo recycling assistance programs and budget commitments to support these efforts.

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 islandwide program, a net gain of 53,000 tons per year over pre-curbside recycling program activity. The program is already exceeding expectations for green waste. Increased public experience with identifying and sorting recyclables should produce higher results for the mixed recyclables as the program matures.

The City has maintained approximately 100 Community Recycling Bin sites on Oahu. The community recycling bins provide convenient drop-off to areas not serviced by curbside collection, for residents living in condos, and for the host schools.

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.

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. DOH has indicated that they are allowing the manufacturers additional time to develop their programs and are also proposing amendments to the legislation that will more clearly specify the criteria and requirements for these programs. DOH expects to have collection data in April (due from manufacturers by March 31). DOH has indicated that it expects the programs and consumer convenience to evolve as the new program matures. City ENV will continue to work in collaboration with DOH and local ewaste recycling companies.

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. The format is

interactive, supporting 24/7 viewing of all episodes on demand. Coming up in April/May 2011, City ENV is sponsoring 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 will include distribution of Opala IQ Books and educational materials to students and teachers.

D. Solid Waste Integrated Management Plan

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

5. City Council Resolutions and Bills

The following resolutions were transferred from the City Council Public Infrastructure Committee to the City Council Public Works and Sustainability Committee.

<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
10-4	City auditor conduct an audit relating to delays in shipping City's municipal solid waste to mainland	Resolution deferred in committee 3/2/10 No change
10-146	City administration promote Freecycle Honolulu	Resolution deferred in committee 5/25/10
10-242	City administration conduct public education regarding proper disposal of bulky wastes	Resolution reported out of committee 10/5/10

The following bills were transferred from the City Council Public Infrastructure Committee to the City Council Public Works and Sustainability Committee.

<b>BILL NO.</b>	<b>DESCRIPTION</b>	<b>STATUS</b>
76 (2009)	Waimanalo Gulch Landfill close no later than July 31, 2012	Bill deferred in committee 12/01/09
43 (2010)	Regulate use of non biodegradable plastic bags	Bill deferred in committee 8/31/10
44 (2010)	Require recycling or reuse of construction and demolition wastes	Bill deferred in committee 8/31/10
47 (2010), CD 1	Terminate recycling residue discount	Bill reported out of committee 3/28/11 for passage on second reading, scheduling a public hearing



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 Comments:

Question: Are private cell phone carriers recycling cell phones for domestic violence assistance purposes?

Response: Yes

Comment: Received notice of this meeting through his neighborhood board and thanks the City for the opportunity to get information concerning the current status of the landfill.

Comment: He did not realize the degree to which the City is actively pursuing not only recycling but also education at the school level. He asked if he could take the extra school information packets to distribute at his Board meeting. The County gave him the materials.

Comment: He also did not realize the amount of outreach the City is doing regarding the handling of municipal solid waste and was impressed with their efforts.

He stated that he was concerned about the recent events caused by flooding at the Waimanalo Gulch Solid Waste Landfill and urged the City to resolve these issues and to make sure that no future landfill site would have the same issues. The City responded that the storm water diversion channel was now complete and that these types of issues would be dealt with in any future landfill siting process.

There being no further comments the meeting adjourned at 5:30 pm.

Public attendees:

Glenn Ida

City Attendees:

Department of Environmental Services

Manuel S. Lanuevo, P.E., Deputy Director  
Wilma Namumnart, P.E., Acting Chief Refuse Division  
Suzanne Jones, Recycling Program Branch Chief

Department of the Corporation Counsel

Sharon Blanchard, Deputy Corporation Counsel

Other

Dee Dee Letts, Meeting Facilitator

Joe Whalen, Waste Management of Hawaii

Dennis Galolo, Councilmember Cachola's staff

Philmund Lee, Councilmember Berg's staff