

Status Report on Reducing and/or Continuing the Use of
Waimanalo Gulch Sanitary Landfill (WGSL)
Public Hearing
January 9, 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 December 26, 2011, and on the City's Refuse Division website, 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

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 seven meetings to date. The next meeting will be scheduled in January 2012.

- 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 H-POWER maintenance diversions during October 2011, resulting in an increased amount of MSW delivered to WGSL.

Oct. 2011	31,036 tons
Nov. 2011	24,564 tons
Dec. 2011	23,640 tons

There was one complaint during this period for alleged odors occurring on December 18, 2011. The complaint was not received until January 3, 2012, and is under investigation.

3. Progress Report on Landfill Diversion

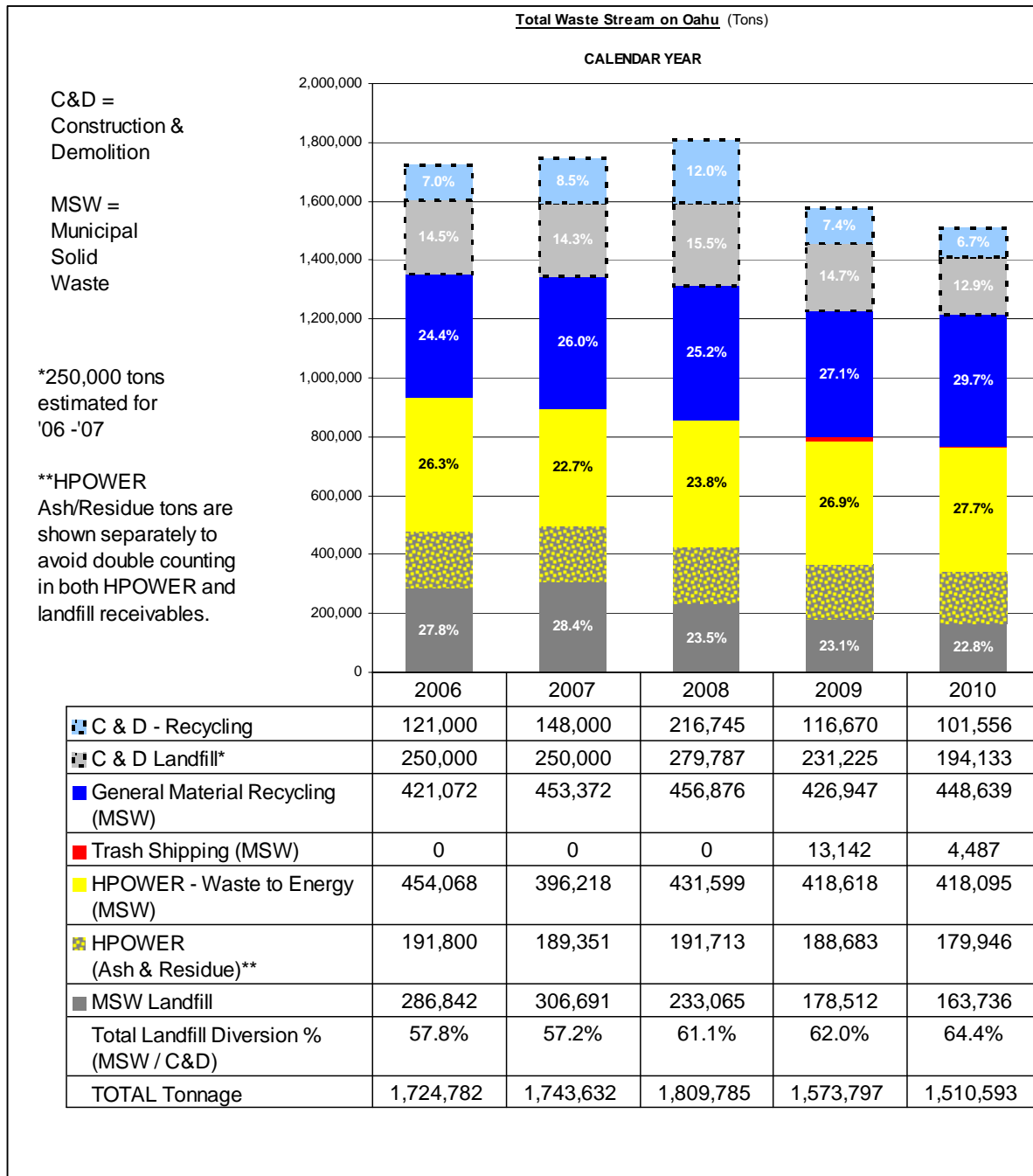
- A. The H-POWER expansion project is approximately 90% completed and is on schedule.
- B. Interim Off-Island Shipping of MSW

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 December 31, 2011, approximately 15,500 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 will be gathered and compiled during the first quarter of 2012, and updated chart and analysis posted online at 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 five (5) calendar years (2006 – 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.

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.

Year	General Material Recycling	C&D Recycling	Total Recycled
2010	448,639	101,556	550,195
2009	426,947	116,670	543,617
2008	456,876	216,745	673,621
2007	453,282	148,952	602,234
2006	421,072	121,675	542,747
2005	417,669	193,829	611,498
2004	386,338	173,916	560,254
2003	366,639	106,773	473,412
2002	352,699	139,055	491,754
2001	367,300	114,070	481,370
2000	327,710	165,000	492,710
1999	314,075	225,200	539,275
1998	318,690	148,800	467,490
1997	313,394	204,400	517,794
1996	299,574	95,300	394,874
1995	294,340	44,400	338,740
1994	290,412	35,700	326,112
1993	241,600	30,00	271,600
1991	167,152	0	167,152
1988	73,992	0	73,992

Oahu Recycling 2010

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

Oahu Recycling 2009

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
TOTAL	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. 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.

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. 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 is gathering collection data and has yet to publish. 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 e-waste recycling companies.

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. Creative development for a second season of educational performances for the schools is underway.

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

Olinia 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 will continue on January 11, 25, and February 8, 2012.

5. City Council Resolutions and Bills

RESOLUTION NO.	DESCRIPTION	STATUS
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 deferred in committee 3/2/10 No change
10-111	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 adopted 10/13/10.

BILL NO.	DESCRIPTION	STATUS
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 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 Reinstates a discounted disposal fee	Bill passed into law effective 5/31/11
36 (2011), CD1, FD1	for residue from recycling operations at 50% FY12, 35% FY13, 20% FY14.	Bill passed into law effective 7/1/11

All resolutions and bills, and video of Council meetings, can be found at the City website, www.honolulu.gov

Public Questions and Comments:

Q: Is the waste reported in the chart for H-Power and Ash prepared in a way to prevent double counting?

A: Yes

Q: When is construction of the new burner at H-Power going to be complete?

A: Testing should begin between June/July of 2012 with the burner being online by December 2012.

Q: What was the original schedule?

A: Originally testing was planned for January 2012 with the unit being online by mid 2012.

Q: You have stated that even with the mass burner there are still types of waste that can not be accommodated such as animal carcasses and medical waste. What is the amount of the waste stream that can not be accommodated at H-Power and what is its composition?

A:

WASTE THAT CANNOT BE ACCOMMODATED AT H-POWER

Material	Estimated Tons/No. per Year	Notes
Dead Animals	40 Ea.	With the new 3 rd boiler, H-Power will be able to handle small to medium sized animals. However, large dead animals (over 70 pounds) will not be accepted.
Sandblast Grit	325	This material has no heat value.
Petroleum Contaminated Soil	1,600	H-Power cannot process soil/dirt material.
Wastewater Treatment Plant (WWTP) Sewage Sludge	19,000	Once the new Green Waste / Food Waste / Sewage Sludge In-Vessel Composting facility is operation (estimated mid 2013), all sewage sludge from the Honouliuli and Kailua WWTP facilities (approximately 16,000 tons per year) will be accommodated at this facility. Other projects including modifications at H-POWER and an expansion of sewage digester facilities at Sand Island WWTP are being considered to absorb the remainder of the sludge tonnage.
WWTP Bar Screenings and Grit	3,000	This material has minimal heat value.
Medical Waste	900	Sharps and red bag type wastes cannot be handled at H-Power due to concerns for worker safety.

Material	Estimated Tons/No. per Year	Notes
Auto Shredder Residue	26,000	H-Power is currently evaluating whether this material may be combusted (there is a potential for problems due to the high heat content and emissions).
Other Miscellaneous Waste (fiberglass, clays, resins, filters, absorbents, tank bottom sludge, etc.)	1,000	These materials may or may not be processed at H-Power and will need to be evaluated on a case-be-case basis.

Public attendees:

Cynthia K.L. Rezendes
Chris Goodin
James Kawamura

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

Other:

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