

Status Report on Reducing and/or Continuing the Use of  
Waimanalo Gulch Sanitary Landfill (WGSL)  
Public Hearing  
April 20, 2015  
5:00 p.m.  
Kapolei Hale , 1000 Uluohia Street,  
Conference Room A

Presentation

1. Opening and Welcome

Notice of this public hearing was published in the Honolulu Star Advertiser on April 6, 2015, 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 first meeting of the Landfill Advisory Committee was held on January 20, 2011, and subsequent meetings were held on February 10, March 10, March 31, May 12, July 19, November 8, 2011 and February 1, March 16, and April 20, 2012. The Landfill Advisory Committee's final report was completed on September 25, 2012. All Committee meetings were open to the public and to public comment. Handouts provided to the Landfill Advisory Committee, the Group Memory of each meeting, and the final report are posted online at [www.opala.org](http://www.opala.org).

In the final report, 11 potential sites were identified and ranked based on community criteria. The City's consultant is finalizing the methodology to further assess these 11 potential sites, including environmental impact, costs and ability to acquire, capacity requirements, logistics and waste transportation, capacity projections for current landfills (WGSL/PVT), and a timetable for WGSL/new landfill development/construction.

- B. . The following table summarizes the amount of municipal solid waste (MSW), and H-POWER ash and residue delivered to WGSL during the last three months.

MONTH	MSW	ASH	RESIDUE
January 2015	6,836 tons	10,942 tons	5,654 tons
February 2015	5,399 tons	11,439 tons	5,033 tons
March 2015	5,789 tons	9,447 tons	6,300 tons

There were no complaints received during this reporting period.

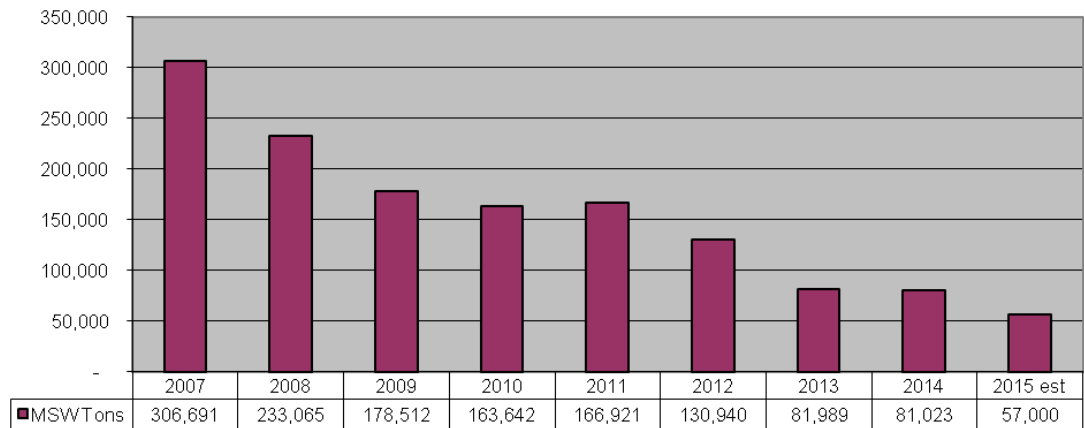
### 3. Progress Report on Landfill Diversion, Recycling and Planning

#### A. H-POWER

The H-POWER Facility is operating at full capacity, including the processing of bulky waste and City-collected tires through a DOH variance. DOH approved an extension to the variance. It is subject to renewal every 5 years with the same effective dates as the DOH solid waste permit. The sludge project, which will divert sewage sludge from the landfill to H-POWER, is anticipated to be completed by end of April 2015. Diversion of other combustible wastes from the landfill, including medical waste and auto shredder residue are also being assessed.

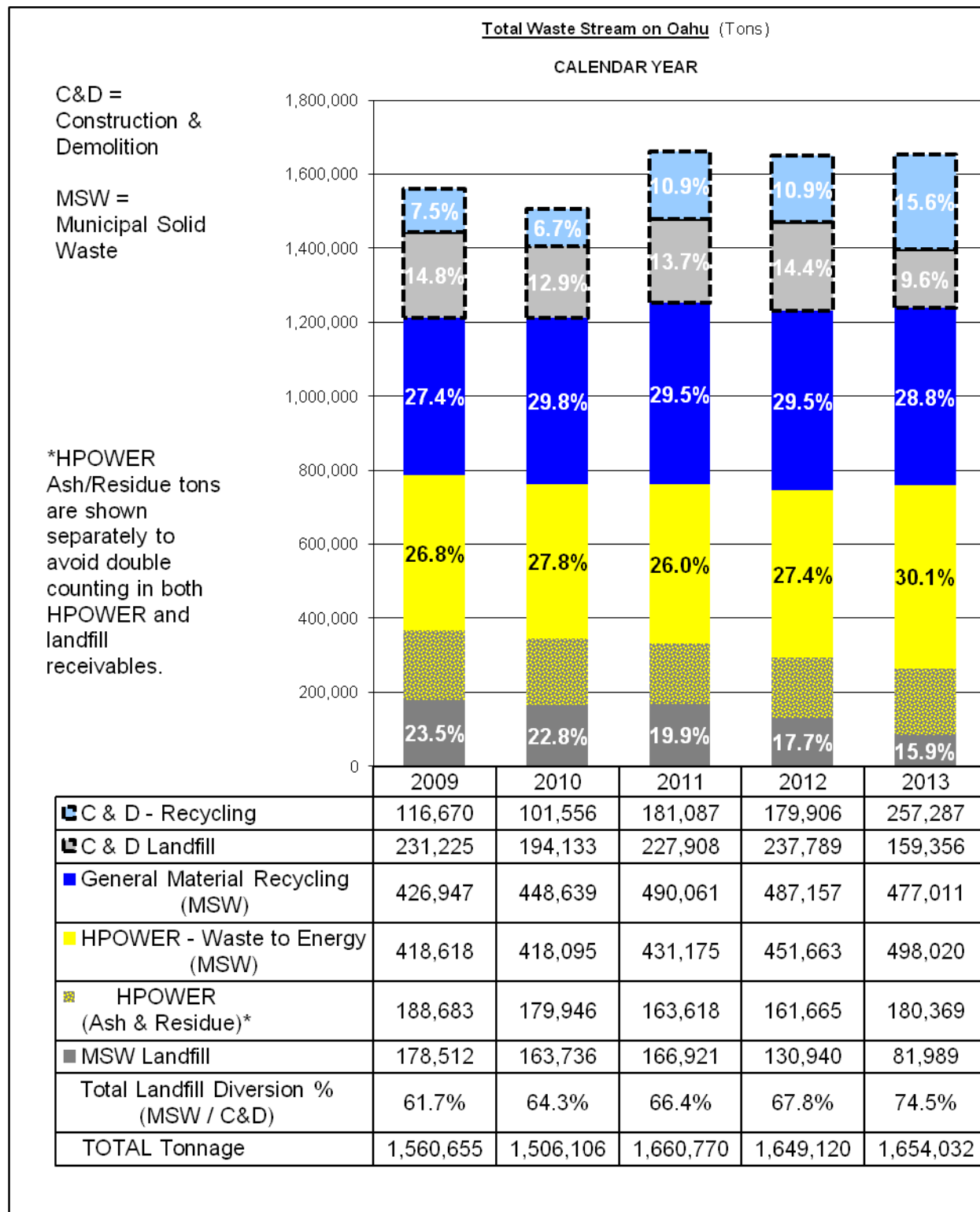
The following graph illustrates the annual reduction of MSW delivered to the landfill generally as a result of diverting more waste to H-POWER.

Tons MSW Received at WGSFL  
(Calendar Year)



**B. Materials Recycling**

To present a complete waste flow picture, the most recent available data is for calendar year 2013. 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 2014 will be compiled during the first half of 2015, 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 five (5) calendar years (2009–2013).

*Brief analysis:* The data shows how Oahu's waste has been diverted from landfill through increases in recycling and waste-to-energy. Recycling rates are remaining steady, just under 30% for general material recycling and about 15% for construction and demolition material, while expansions to the H-POWER waste-to-energy facility have enabled WTE to exceed 30%, for a combined total waste landfill diversion rate of almost 75%.

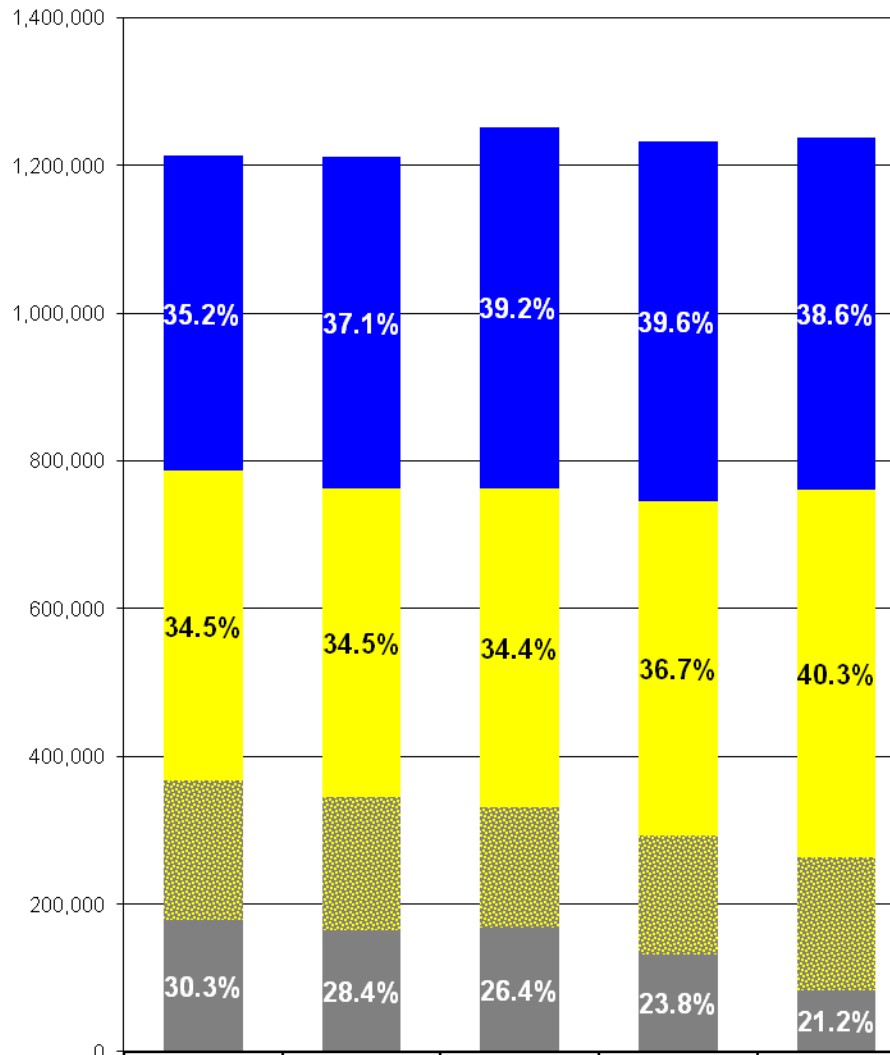
Total waste includes all waste of all types disposed/recycled on Oahu, including construction and demolition waste. There are two landfills on Oahu: the City's Waimanalo Gulch Sanitary Landfill (WGSL), which is designated for MSW, and the private PVT Landfill, which is permitted for construction and 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 over 78% and the general material recycling rate is about 39%. See the chart below for a fuller comparison of diversion rates for WGSL over the most recent five (5) years. Important to note the breakdown of material to the WGSL – of the 21% of material landfilled in 2013, less than 7% was MSW. The rest is ash and residue from H-POWER processing.

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

CALENDAR YEAR

MSW =  
Municipal  
Solid  
Waste

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



	2009	2010	2011	2012	2013
■ General Material Recycling (MSW)	426,947	448,639	490,061	487,157	477,011
■ HPOWER - Waste to Energy (MSW)	418,618	418,095	431,175	451,663	498,020
■ HPOWER (Ash & Residue)*	188,683	179,946	163,618	161,665	180,369
■ MSW Landfill	178,512	163,736	166,921	130,940	81,989
Total Landfill Diversion % (MSW)	69.7%	71.6%	73.6%	76.2%	78.8%
TOTAL Tonnage (MSW)	1,212,760	1,210,417	1,251,775	1,231,425	1,237,389

*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. The recycling of construction and demolition (C&D) materials, such as concrete, rock and asphalt, accounted for about 250,000 tons in 2013. 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
2013	477,011	257,287	734,298
2012	487,159	179,906	667,065
2011	490,061	181,087	671,148
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	30,000	271,600
1991	167,152	0	167,152
1988	73,992	0	73,992

<b>Oahu Recycling 2013</b>	
<b>Material Type</b>	<b>Amount in tons</b>
<b>PAPER</b>	
Corrugated Cardboard	45,235
Newspaper	14,415
Office Paper	12,548
Other Paper	1,326
<b>METALS</b>	
Ferrous (includes autos)	171,143
Non-Ferrous (includes aluminum)	14,016
<b>GLASS</b>	22,934
<b>PLASTIC</b>	5,903
<b>TIRES</b>	12,926
<b>AUTO BATTERIES</b>	2,654
<b>ELECTRONIC SCRAP</b>	2,247
<b>GREEN WASTE (yard trimmings)</b>	104,065
<b>WOOD WASTE/PALLETS</b>	11,436
<b>CONSTRUCTION &amp; DEMOLITION (rock, concrete, asphalt)</b>	257,287
<b>FOOD WASTE</b>	38,466
<b>SEWAGE SLUDGE (Tonnage data being researched)</b>	
<b>OTHER REUSE (Goodwill, Salvation Army)</b>	18,235
<b>TOTAL</b>	<b>734,298</b>

<b>Oahu Recycling 2012</b>	
<b>Material Type</b>	<b>Amount in tons</b>
<b>PAPER</b>	
Corrugated Cardboard	51,382
Newspaper	13,600
Office Paper	11,177
Other Paper	3,537
<b>METALS</b>	
Ferrous (includes autos)	189,722
Non-Ferrous (includes aluminum)	14,679
<b>GLASS</b>	22,616
<b>PLASTIC</b>	6,264
<b>TIRES</b>	13,106
<b>AUTO BATTERIES</b>	7,503
<b>ELECTRONIC SCRAP</b>	2,356
<b>GREEN WASTE (yard trimmings)</b>	97,807
<b>WOOD WASTE/PALLETS</b>	10,145
<b>CONSTRUCTION &amp; DEMOLITION (rock, concrete, asphalt)</b>	179,906
<b>FOOD WASTE</b>	25,845
<b>SEWAGE SLUDGE (Tonnage data being researched)</b>	-
<b>OTHER REUSE (Goodwill, Salvation Army)</b>	17,420
<b>TOTAL</b>	<b>667,065</b>



The City's efforts to increase residential recycling have continued with the expansions of its island-wide curbside recycling program and the continued promotion of its condo recycling assistance program. 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** – Curbside recycling participation remains strong; recovery rates gradually increasing. ENV completed the final phase expansion of the fully-automated 3-cart curbside recycling program in May, 2010. There are currently 160,000 homes participating in the program, and capturing material at a rate of 22,000 tons of mixed recyclables and 70,000 tons of green waste per year. In November 2011, the City completed an evaluation of the first year of full operation, which indicated that the program had achieved a 77% capture rate for green waste and 53% capture rate for mixed recyclables. Increased public experience with identifying and sorting recyclables is producing 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.

**Multi-Material Recycling Centers** – Recycling through HI-5 redemption and other recycling drop-off is available to those without curbside collection service. HI-5 redemption centers now accept a wide array of recyclable materials, providing the community with a one-stop recycling center for all their materials. Currently, there are some 60 locations around Oahu that offer "HI-5 plus" recycling, accepting paper, plastic and glass containers, and metals, along with providing HI-5 redemption, including a City recycling drop-off location fronting its Waiialua Base Yard in Haleiwa (Emerson Rd). The Waiialua location includes 10 96-gallon blue carts, complete with instructional signage and stickers for the community to use. All blue cart recyclables are acceptable, including plastics (1 & 2), glass bottles and jars, metal cans, newspaper, corrugated cardboard and white and colored office paper.

**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, and additionally provides technical assistance, educational materials, wheeled carts and guidance in establishing collection services.

**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 include computers and

televisions. Collection and recycling of e-waste has increased, but the law is weak in its requirements for the manufacturers to achieve recovery goals or to provide consumer convenience in take back programs. DOH is looking for ways to strengthen the collection programs, and has proposed bills in the most recent four State legislative sessions (2012, 2013, 2014, 2015). The most recent bill, SB1049, which is currently moving towards approval in the State House, effectively strengthens the law by preventing electronic device manufacturers from providing only a mail-back option to return an electronic device to the manufacturer for recycling. ENV will continue to work in collaboration with DOH and local e-waste recycling companies to support local programs and legislative proposals.

**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.

**Plastic Bag Ban** – Effective July 1, 2015, businesses shall be prohibited from providing plastic checkout bags and non-recyclable paper bags to their customers at the point of sale. As per ORD-12-8, amended by ORD 14-29, the City's Department of Environmental Services is assigned the responsibility to implement and enforce this ban. Informational sheets and compliance forms were sent to 9,200 potentially affected businesses at the beginning of February 2015. Public notices will be placed in Star Advertiser and MidWeek in May. All information pertaining to the ban is also posted online on Opala.org. On July 1, 2015, City staff will begin enforcing the ban. Businesses will be required to submit annual compliance forms to verify their compliance with the ban.

**Public education** regarding recycling is ongoing, employing multiple media--distribution of brochures and print materials, opala.org website, WasteLine e-newsletter, Green Channel video, and annual events including Tour de Trash and Discover Recycling.

Green Channel – On Oceanic 332 and streaming online at opala.org provides video shorts about the City's recycling initiatives. Dozens of episodes are archived to keep viewers entertained. Most recent production of a series of 30-second tips on curbside recycling. These videos provide easy visuals for better understanding and teaching tools for

classrooms. The partnership with Oceanic Time Warner Cable was launched in 2009. The format is interactive, supporting 24/7 viewing of all episodes on demand. As part of its agreement with the City, Oceanic runs cross-promotional ads for The Green Channel on many of its other channels.

Recycling education in the schools -- Recycling education shows presented by the Honolulu Theatre for Youth combined with classroom activity books educate our youth to become expert recyclers and encourage them to support their family to recycle at home. Every year, the program reaches approximately 20,000 students and teachers. The fifth season of performances included a Tenney Theatre presentation in November and December 2014, and a traveling show to local schools entitled "Sort It Out!" in February 2015. Planning for a sixth season of performances is currently underway.

In-store recycling education – reaches island residents where they shop for the products that will eventually make their way to the blue bin. In September 2013, in partnership with Costco, the City installed large 3D displays at all four Costco stores, delivering the message, "Sort It Out For Recycling And Energy. Nothing Wasted, Nothing To Landfills", and distributing brochures and a handy list of what to recycle (sticker). The City continues to maintain and promote these displays,

#### C. Solid Waste Integrated Management Plan

Hawaii Revised Statutes (HRS) Section 342G-24 now require each county to submit revised integrated solid waste management plans every 10 years with an interim status report submitted five years after every submission of a revised plan. The City's revised management plan was submitted December 2008 and will be updated again in 2018. The interim status report was submitted to the State Department of Health in December 2013 and can be viewed online at [www.opala.org](http://www.opala.org) in the Resource Library/Technical Studies.

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

The current SUP provided that WGSL 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 WGSL 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 WGSL 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, 11, 23 and May 25, 2012. On May 25, 2012, the Commission stayed the matter for six (6) months in light of the Hawaii Supreme Court's (Supreme Court's) decision to strike Condition No. 14 of the SUP described below.

The City had filed an appeal to the Supreme Court on February 22, 2012 to delete Condition No. 14. On May 4, 2012, the Supreme Court ruled in favor of the City and struck down Condition No. 14, which was the State Land Use Commission's condition imposing the MSW deadline. The Supreme Court further ordered that the matter be remanded to the Circuit Court and the Land Use Commission for action on the SUP consistent with the Supreme Court decision. The State Land Use Commission convened on July 5, 2012, to discuss procedural options only, in light of the Supreme Court remand and stayed Commission proceeding.

Upon request by ENV, the LUC directed the parties to file written briefs regarding the proper procedural steps. ENV argued that the case decided by the Supreme Court remain with the LUC for decision-making. The intervenors argued to remand the Supreme Court case back to the Planning Commission with a request to consolidate the amendment application and the Supreme Court cases. The LUC decided at its meeting on September 14, 2012, to remand the Supreme Court case to the Planning Commission with a recommendation to consolidate the two cases. On December 19, 2012, the Planning Commission continued its consideration of the LUC request to consolidate the two cases to allow the incoming City administration to weigh in on the matter and the possibility of a joint recommendation from the parties. On February 20, 2013, the Planning Commission again continued its consideration of the LUC request to consolidate based upon the parties' representation that they intended to file a joint recommendation to the Planning Commission regarding both the

consolidation and the subject matter of the remand. On May 16, 2014, the LUC requested a status report on the remanded matter. The City represented that the parties are continuing to negotiate a joint recommendation. The LUC directed the City to provide an update to the LUC and the parties of these negotiations every two months, beginning in July 2014.

The landfill will continue operations under the current SUP while the deadline for receipt of MSW is resolved by the Planning Commission and the LUC.

5. Relevant City Council Resolutions and Bills

RESOLUTION NO.	DESCRIPTION	STATUS
12-290	To establish a City policy to continue the Waimanalo Gulch Sanitary Landfill as an Oahu landfill.	First reading in committee on 10/10/12.
13-083	To assess methods to reduce the improper disposal of bulky wastes on public streets and sidewalks.	Resolution adopted 6/5/13.
14-127	To enter into an intergovernmental agreement with the State for the allotment of funds for operating and maintaining a glass recycling program.	Resolution adopted 7/9/14.
14-175	To request a study on the use and impacts of single-use food service containers. Report to Council due June 30, 2015.	Resolution adopted 8/27/14.

BILL N O.	DESCRIPTION	STATUS
10 (2012),CD 1	Regulate use of nonbiodegradable plastic bags and other bags provided to customers. Takes affect 2015.	Bill passed into law 5/10/12.
38 (2014)	Amends ban on plastic bags to disallow biodegradable plastic bags. Effective date remains July 2015.	Bill passed into law 9/25/14.
61 (2012), FD1	Terminates recycling disposal discount for residue from recycling operations effective July 1, 2013.	Bill passed into law 11/29/12.
62 (2012), CD1	Amends City Ordinance to conform State HRS related to required submittal dates for the integrated solid waste management plans.	Bill passed into law effective 12/21/12
009 (2014)	Amend Chapter 9, Revised Ordinance of Honolulu, 1990, as amended, relating to City provided refuse services, to allow the City to charge for City provided refuse collection services.	Bill deferred in Council.
47 (2014)	Establishes authority to waive H-POWER disposal fees for processed feedstock.	Bill introduced in Council 7/9/14
41 (2014)	Establishes a one-year pilot program for bulky waste pickups to be administered by the city by appointments only.	Bill deferred in Council. 6/25/14
40 (2014)	Prohibits certain types of disposable food containers (polystyrene foam)	Bill deferred in Council. 6/25/14 Res 14-175 introduced 7/24/14.

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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City Attendees:

- Department of Environmental Services
- Manny Lanuevo, Chief Refuse Division
- Suzanne Jones, Assistant Chief Refuse Division
- Wayne Hamada, Interim Energy Recovery Administrator
- Ahmad Sadri, Interim Disposal Operations Engineer
- Mike O'Keefe, Recycling Branch Chief

- Department of the Corporation Counsel
- Dana Viola, Deputy Corporation Counsel

Other:

- Joe Whelan, General Manager, Waste Management of Hawaii
- DeeDee Letts, Resolutions Hawai`i

Public Attendees:

Polly Grace  
Jame Schaedel  
Mike Freitas  
Kathleen Davenport

Questions, Answers and Comments from the meeting:

- Q: In 2011, PVT asked for rezoning of the adjacent property to expand their construction/demolition (CD) waste landfill. The City did not grant the rezoning because the parcel was identified for park use. Since no expansion was granted to PVT, what are we going to do with commercial CD waste since it is not accepted at WGSF?
- A: We have no specifics on PVT's plans to expand their landfill. In our current process of examining new sites, the capacity needs for all waste streams, including CD waste, will be looked at. Although we do not take commercial CD waste at WSLF, it is permitted to accept CD waste.
- Q: How will you respond when PVT runs out of capacity, which is expected in the next 5 years?
- A: We will be better able to respond to questions relating to CD and other waste streams when we finish the site assessment phase. The City's consultant is finalizing the methodology to further assess the potential landfill sites.
- Q: What about the recent backup of trucks waiting in line to access H-POWER and the resulting traffic problems they are causing?
- A: The recent backup of trucks at H-POWER were caused by unplanned boiler outages and large buildup of waste inventory. The lengthy truck lines are very concerning and something we need to address.
- Q: Not only do we need a backup plan for PVT but something needs to be done about the dust problem. What can we do about that?
- A: PVT is a private disposal site. Any concerns or complaints about that site should be directed to the Department of Health.
- C: When you do your site evaluation and look at the space needed for CD waste, please factor in projects such as the rail. When PVT said they would be out of space in 5 years, they stated that the rail project was not factored into their equation.

Meeting adjourned at 6:00 PM.