

Status Report on Reducing and/or Continuing the Use of
Waimanalo Gulch Sanitary Landfill (WGSL)
Public Hearing
April 14, 2014
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 March 31, 2014, 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."

A Mayor's Advisory Landfill Site Selection Committee was formed and 10 committee meetings were held. An Executive Summary of the final committee report is posted on the Opala.org website. The City is in the process of further evaluating the sites identified in the report.

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

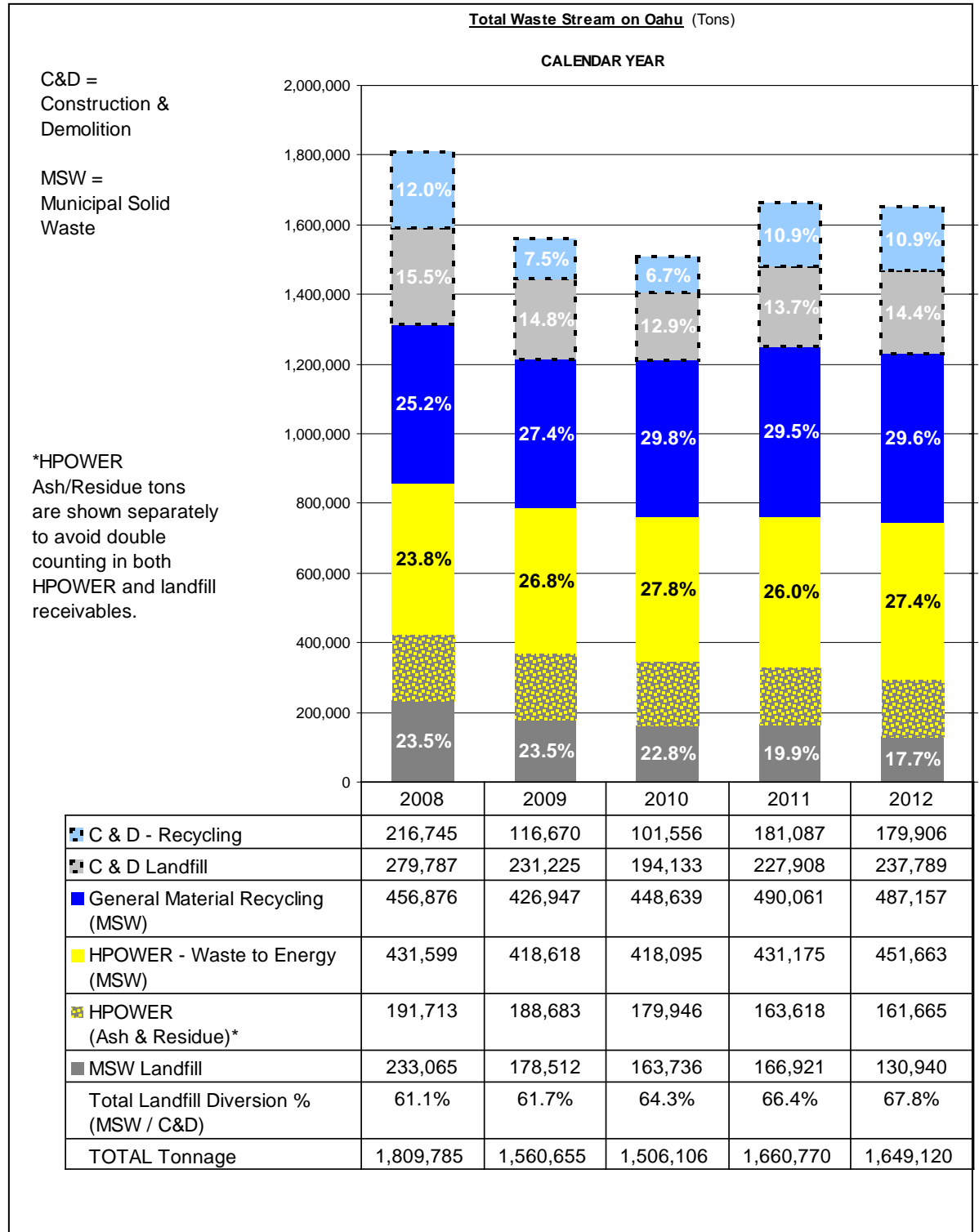
| MONTH | MSW | ASH | RESIDUE |
|---------------|------------|-------------|------------|
| January 2014 | 7,129 tons | 12,205 tons | 4,374 tons |
| February 2014 | 8,489 tons | 9,411 tons | 6,193 tons |
| March 2014 | 7,123 tons | 10,335 tons | 3,858 tons |

One complaint was received during the last week of March involving night time equipment noise. The old ash monofill is currently undergoing final closure work at the front of the landfill, portions of which are being conducted at night. Because of the complaint, the work has been ceased until the night activities can be conducted without causing further noise impacts to the surrounding community.

3. Progress Report on Landfill Diversion, Recycling and Planning

- A. H-POWER
The H-POWER expansion project (specifically the third boiler) is operating at full capacity, including the processing of bulky items 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. We are also assessing additional combustible wastes and developing plans to divert more types of waste from the landfill, including sewage sludge, medical waste, and auto shredder residue.

- B. Materials Recycling
To present a complete waste flow picture, the most recent available data is for calendar year 2012. 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 2013 is currently being compiled, and an updated chart and analysis will be posted online at www.opala.org mid year.

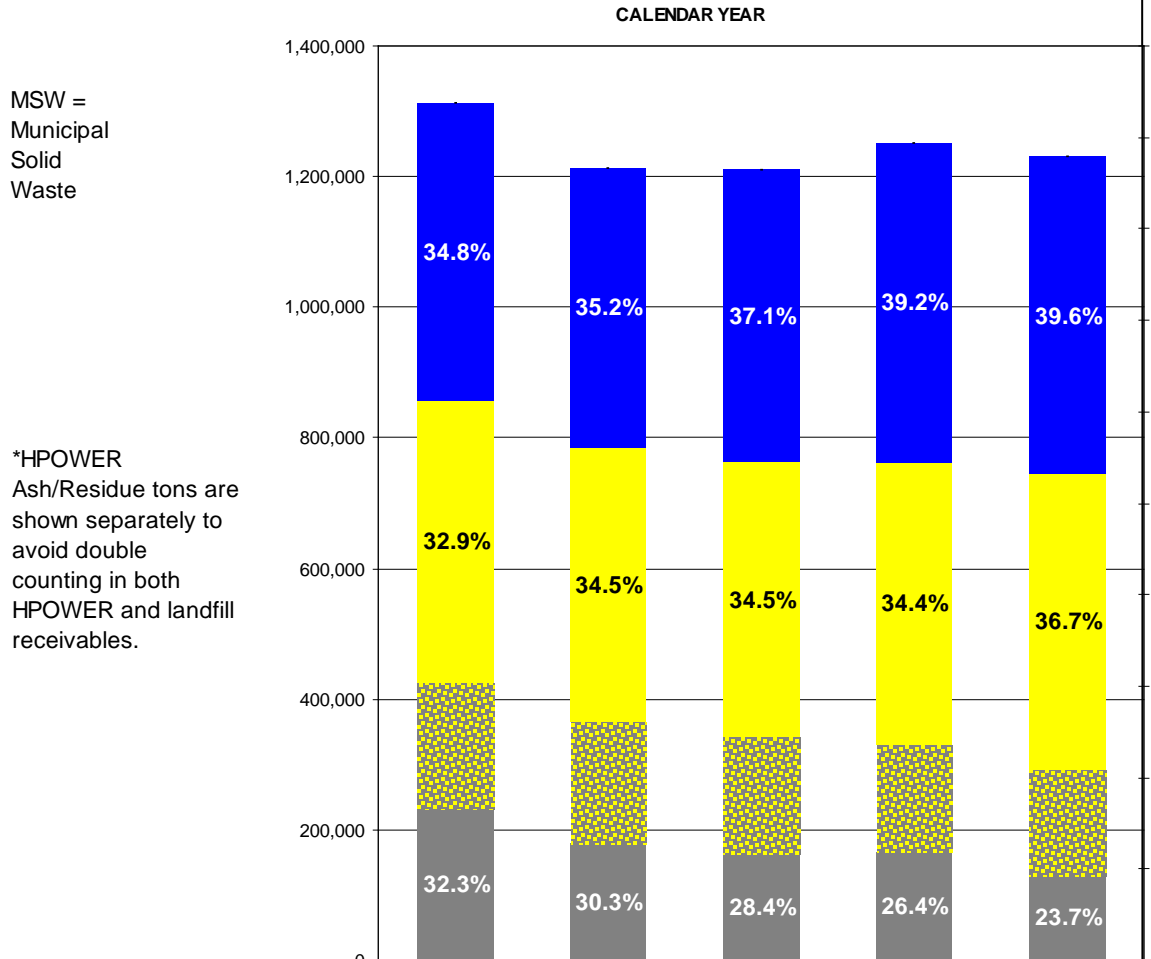


The data in the chart above presents the annual quantity of waste (in tons) that is processed through recycling, waste-to-energy or landfilling for the most recent five (5) calendar years (2008–2012).

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. Note that overall waste generation has decreased significantly since 2008, 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. A slight increase was noted in 2011, with waste generation rates leveling off in 2012. The general material recycling rate (shown in the darker blue) increased from 25 percent (2008) to 27 percent (2009) and to more than 29 percent (2010, 2011 and 2012). The total landfill diversion rate continued to increase from more than 61 percent (2008/2009) to 64 percent (2010) to 66 percent (2011) and to nearly 68 percent (2012), 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 over 76% and the general material recycling rate is 39%. See the chart below for a fuller comparison of diversion rates for WGSL over the most recent five (5) years.

Municipal Solid Waste Stream on Oahu (Tons)



| | 2008 | 2009 | 2010 | 2011 | 2012 |
|------------------------------------|-----------|-----------|-----------|-----------|-----------|
| ■ General Material Recycling (MSW) | 456,876 | 426,947 | 448,639 | 490,061 | 487,157 |
| ■ HPOWER - Waste to Energy (MSW) | 431,599 | 418,618 | 418,095 | 431,175 | 451,663 |
| ■ HPOWER (Ash & Residue)* | 191,713 | 188,683 | 179,946 | 163,618 | 161,665 |
| ■ MSW Landfill | 233,065 | 178,512 | 163,736 | 166,921 | 130,940 |
| Total Landfill Diversion % (MSW) | 67.7% | 69.7% | 71.6% | 73.6% | 76.2% |
| TOTAL Tonnage (MSW) | 1,313,253 | 1,212,760 | 1,210,417 | 1,251,775 | 1,231,425 |

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.

| Year | General Material Recycling | C&D Recycling | Total Recycled |
|----------------------|-----------------------------------|--------------------------|-----------------------|
| 2012 | 487,197 | 179,906 | 667,103 |
| 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 |

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

| Oahu Recycling 2011 | |
|--|-----------------------|
| Material Type | Amount in tons |
| PAPER | |
| Corrugated Cardboard | 45,984 |
| Newspaper | 10,251 |
| Office Paper | 12,689 |
| Other Paper | 3,755 |
| METALS | |
| Ferrous (includes autos) | 182,393 |
| Non-Ferrous (includes aluminum) | 24,372 |
| GLASS | 24,140 |
| PLASTIC | 6,161 |
| TIRES | 13,504 |
| AUTO BATTERIES | 7,959 |
| ELECTRONIC SCRAP | 2,414 |
| GREEN WASTE (yard trimmings) | 103,666 |
| WOOD WASTE/PALLETS | 10,271 |
| CONSTRUCTION & DEMOLITION (rock, concrete, asphalt) | 181,087 |
| FOOD WASTE | 25,228 |
| SEWAGE SLUDGE (Tonnage data being researched) | - |
| OTHER REUSE (Goodwill, Salvation Army) | 17,274 |
| TOTAL | 671,148 |

The City's efforts to increase residential recycling have continued with the expansions of island-wide curbside recycling and condo recycling assistance programs. 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 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 20,000 tons of mixed recyclables and 50,000 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 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. Additionally, the City is moving forward to further expand curbside recycling to the remaining 20,000 homes around Oahu still serviced with a manual collection system, starting with a pilot program on the North Shore tentatively scheduled to start June 2014.

Multi-Material Recycling Centers -- 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 and non-deposit glass, plastic and metals along with providing HI-5 redemption.

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 three State legislative sessions (2012, 2013, 2014). The most recent versions had been developed with input from a task force of all the

state, county and industry stakeholders. 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.

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. New episodes are produced annually with an archive of dozens to keep viewers entertained. The format is interactive, supporting 24/7 viewing of all episodes on demand. City ENV supports recycling education for our youth through school recycling projects, classroom activity books and recycling education shows presented by the Honolulu Theatre for Youth. The fourth season of performances featured a theatre presentation that ran in January and February 2014 plus a traveling show to local schools entitled "Sort It Out!" for January 2014. The shows include distribution of Opala IQ Books and educational materials to students and teachers. A fifth season of performances is planned for December 2014 – February 2015. 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).

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 in the Resource Library/Technical Studies.

4. Special Use Permit (SUP) Amendment

The current SUP provided 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, 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.

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. |
| 13-134 | To enter into an intergovernmental agreement with the State for the allotment of funds for operating and maintaining a glass recycling program. | Resolution introduced 6/14/13. |

| 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. |
| 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. |

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

City Attendees:

Department of Environmental Services
Manny Lanuevo, Division Chief
Suzanne Jones, Assistant Division Chief
Wayne Hamada, Interim Energy Recovery Administrator
Ahmad Sadri, Interim Disposal Branch Chief
Michael O'Keefe, Recycling Program Branch Chief

Other:

Joe Whelan, General Manager, Waste Management of Hawaii

Public:

Polly Grace

The following comment was made during the public hearing:

C: I was glad to see the improvements to the drainage that goes under the roadway.

The meeting was adjourned at 5:55 p.m.

