

## **THE MAYOR'S COMMUNITY MEETINGS ON RECYCLING**

Tuesday, April 24, 2007

7:00 PM – 8:30 PM

Kaiser High School Cafeteria

### **GROUP MEMORY**

#### **AGENDA**

- Mayor's Welcome
- Meeting Overview
- Presentation
- Questions and Answers / Comments
- Closing Remarks

#### **Mayor's Welcome and Introductions**

Mayor Mufi Hannemann welcomed and thanked everyone for attending the second of seven community meetings in April and May sponsored by the City and County of Honolulu. The purpose of the meeting is to gather residents' input and ideas for developing a sustainable recycling system. The meetings will also serve as a venue for the City and County to explain what it is doing regarding recycling and the updating of Integrated Solid Waste Management Plan. New data from comprehensive studies that analyze Honolulu's solid waste stream and its programs will be presented by Consultant Karen Luken from R.W. Beck.

Mayor Hannemann introduced Senior Cabinet members who were present at the meeting: Managing Director Wayne Hashiro, Deputy Managing Director Trudy Saito, Environmental Services Director Eric Takamura, Director of Emergency Services Dr. Libby Char, Corporation Counsel First Deputy Donna Woo, Enterprise Services Director Sidney Quintal, Parks and Recreation Deputy Director Dana Takahara-Dias, Budget and Fiscal Deputy Director Patrick Kubota, and secretary to the Department of Planning and Permitting Deputy Director Stephanie Marques. Others attending the meeting included Bill Brennan Mayor's Press Secretary and Chrystn Eads, an Administrative Assistant to the Mayor.

Others introduced included Martin Okabe, Informational Affairs Officer Mark Matsunaga, Environmental Services Communication Officer Ken Kawahara, Recycling Coordinator Suzanne Jones, and Consultants Karen Luke and Ann Hajnosz from R.W. Beck and Ian Arakaki from Limtiaco Consulting.

Mayor Hannemann noted that much has been accomplished since he has taken office including no call island-wide bulky item pick-up, automated curbside recycling of green waste, and continuing efforts to divert waste from the landfill. The City has partnered with metal recycler, Schnitzer Steel Industries, established a public-private partnership with Nike to collect used athletic shoes for recycling of rubber treads, and issued a

request for proposal (RFP) to seek another alternative technology to reduce the waste stream going into the landfill and reduce the island's dependence on oil.

## **Meeting Overview**

The facilitator was introduced and explained that a lot of information would be provided and that her role was to give everyone an opportunity to ask questions and provide comments, and to ensure that the discussion stay focused on the topic. The facilitator explained that comments made at these meetings will be recorded via newsprint at the front of the meeting room and asked that the persons making the comments ensure their comments were recorded accurately. The facilitator noted that input from meeting participants, including questions, will be recorded along with the group memory from each meeting and posted on the City and County's website within two weeks of each meeting. A consolidated summary will also be posted. The website address is ([www.opala.org](http://www.opala.org)).

Handouts provided included a copy of the powerpoint presentation on the Integrated Solid Waste Management Plan which included a comment sheet on the last page to be turned in at the end of the meeting or mailed back to the address provided on the form (City and County of Honolulu's Department of Environmental Services' Refuse Division – Recycling, 1000 Uluohia Street, Suite 212, Kapolei, Hawaii 96707). The facilitator announced that questions and answers would be fielded after the Consultant completed her powerpoint presentation. She also announced that Mayor Hannemann and his Senior Cabinet members would be staying for a half hour beyond the end of the meeting to answer questions or discuss other matters of importance to meeting participants that were not on the agenda this evening.

In addition to the first meeting held on Tuesday, April 9 at Mililani Mauka Elementary School and tonight's meeting at Kaiser High School, the Mayor will be convening five other community meetings on recycling:

- Wednesday, April 25, 7:00 PM to 8:30 PM at Kahuku High School
- Tuesday, May 8, 7:00 PM to 8:30PM at Mission Memorial Auditorium
- Thursday, May 10, 7:00 PM to 8:30 PM at Windward Community College
- Saturday, May 12 (Youth meeting) – 10:00AM-12:00 noon at Iolani School.
- Monday, May 21, 7:00 PM to 8:30 PM at Kapolei Hale

An overview of the meeting agenda was posted and reviewed by the facilitator and included a presentation by Consultant Karen Luken of R.W. Beck followed by questions and discussion. The facilitator reminded meeting participants to complete a survey that was handed to them from Q-mark Research as they entered and pass the surveys to the aisles for collection.

The following Meeting Guidelines were presented by the facilitator and accepted by the group:

- Be courteous to each other.
- Listen as an ally.

- Share the O<sub>2</sub>. Give everyone a chance to talk.
- It's okay to disagree.

## **Presentation**

Consultant Karen Luken from R.W. Beck, has twenty years solid waste management experience throughout the United States. She recently completed the County of Kauai's Integrated Solid Waste Management Plan. The Consultant provided a powerpoint presentation on the Honolulu Integrated Solid Waste Management Plan. The Consultant explained that the goal is to develop a five-year integrated solid waste management plan that includes the City's landfill diversion goal and current strategies to achieve the landfill diversion such as energy and material recycling. She noted that additional strategies to increase landfill diversion would also be discussed, including ways to optimize performance of existing programs, instituting residential curbside recycling programs and expanding waste-to-energy capacity. The impact of additional strategies on landfill diversion would be analyzed, comparative benefits of energy and material recycling would be discussed, and finally, time would be allotted for questions and answers and comments by meeting participants.

### *The Goal: Landfill Diversion*

The Consultant explained that material and energy recycling both aim to divert garbage from the landfill and be recycled into materials or energy. The question the City is faced with is where does it prioritize: energy recycling or material recycling? Statistics were provided on the impact of energy and material recycling on landfill diversion. The total waste generated in 2005 on Oahu was 1.76 million tons, of which 1.00 million tons were recycled into energy/materials and kept out of the landfill. The combined landfill diversion from this recycling initiative is 57%, compared with a national average of 44-46%. Of the total 1.76 million tons of waste generated, a total of 400,000 tons was converted into energy, with a diversion rate of 22%, which exceeds the national average of 14%.

### *Energy Recycling*

The Consultant explained that H-POWER (Honolulu Program of Waste Energy Recovery) is a waste-to-energy facility that aims to keep waste out of the landfill. Waste taken to H-POWER is converted to energy. Annually, H-POWER receives 600,000 tons of garbage of which 400,000 tons are converted to energy and 200,000 tons of non-combustibles and ash are disposed at the landfill.

H-POWER recycles virtually 100% of the ferrous/non-ferrous metals by magnets and extraction at this point is keeping these metals out of the landfill. There are several benefits of energy recycling to Oahu. Energy recycling produces enough energy for 40,000 homes. It also generates \$30 million in annual revenues from the sale of electricity along with another \$1.5 million from the sale of recycled metals. It reduces the reliance on fossil fuel by replacing 600,000 barrels or 7% of our oil imports per year.

## *Material Recycling*

The Consultant presented statistics on the impact of material recycling on landfill diversion. Of the total Oahu 1.76 million tons of waste generated in 2005, 612,000 tons were recycled into new products, with a diversion rate of 35%, compared with the national average of 27-32%. The City and County of Honolulu is again exceeding the national average. Since the late 1980's the percent of tonnage recycled has increased six-fold. In 2005, a wide variety of materials are being recycled, including paper, metals, glass, plastic, green waste, tires, auto batteries, electronic scrap, wood waste/pallets, construction and demolition debris, food waste, sewage sludge, and materials being reused. In 2005, 612,000 tons of materials were recycled, and as a result, these materials were kept out of the landfill, H-POWER, and transfer stations.

The City has focused on residential and commercial recycling of a variety of materials. For residential recycling, drop-in programs were started in the early 90's. It was noted that the number of drop-off sites throughout Oahu that accept paper and mixed containers (glass, plastic, and aluminum) has increased from 20 bins to about 75 drop-off bins. The bottle bill has diverted cans and bottles from the landfill as well as significantly reduced the amount of cans and bottles found on beaches and in parks.

The City has also focused on material recycling programs for commercial businesses. Beginning in 1990 all City buildings were mandated to recycle paper. Focus was placed on the business sector, and on the types of paper materials (i.e., cardboard, newspaper, office paper, low grade paper) that have a viable recycling market for reuse of these materials. By 1996, mandatory office paper recycling was expanded to all commercial office buildings. Hotels and restaurants must recycle their glass bottles. Commercial businesses must also recycle their cardboard trash and are limited in the amount of green waste they are allowed to put out for collection. The City has also encouraged recycling food waste for compost or pigs and implemented the conversion of cooking oil to bio-diesel fuel.

The Consultant explained that the City has developed public-private partnerships with recycling businesses who are seeking to divert waste materials from the landfill. For example, the City has partnered with Schnitzer Steel to use magnets at the landfill to extract ferrous metals. The City has contracted with Synagro to convert sewage sludge to fertilizer pellets.

## *Strategies to Further Increase Landfill Diversion*

The Consultant explained that the City is now faced with developing strategies to further increase landfill diversion by increasing the performance of existing programs (i.e., organic composting, drop bins and HI-5, and office paper and cardboard recycling), instituting curbside recycling for residential mixed recyclables, and increasing energy recycling.

Organics composting can be increased by optimizing the performance of existing Curbside Green Waste Collection. The curbside recycling program is the City's attempt to keep the green waste separated from other waste. By collecting, composting, and reusing green waste, it is being kept out of the waste stream that goes to H-POWER. It is converted to a recyclable product that can be used by residents. Other organics include food waste that is recycled in different ways. For example, low-technology recycling of food waste goes to pig farmers, medium technology recycling of food wastes can go to composting facilities, and high-technology recycling of cooking oils is creating bio-diesel fuel for use by city vehicles and buses. Sludge can be reused and doesn't go to landfills.

The City would like to increase the multi-material residential recycling programs by expanding the drop-off community recycling bins (i.e., multi-material bins, site rotating HI-5 fundraiser bins). Many schools have multi-material recycling bins situated on their campuses as a means for fundraising.

### *Proposed Curbside Recycling Program*

The proposed curbside recycling program includes once/week refuse collection and once/week recycling collection. Recycling collection consists of alternating weekly pickups of green waste and mixed recyclables. A second day garbage collection will be made available by request (if needed) for \$10/month. Residents will have weekly refuse collection via a 96-gallon receptacle (grey bin), alternating weekly green waste or mixed recyclables via a 96-gallon receptacle (green bin) for green waste (i.e., grass, tree and hedge trimmings) and a 64-gallon receptacle (blue bin) for mixed recyclables (i.e., newspaper, corrugated cardboard, aluminum, glass, plastic (#1 and #2)).

The Consultant explained that the proposed program will decrease the need for second day collection for most households. The average 96-gallon bin holds 72 pounds of garbage. The average Oahu household sets out 40 pounds on the first day of collection and 25 pounds on the second day. Participating in recycling programs will decrease total refuse set out by 15 pounds per week.

The proposed program will increase collection service, from 10 times a month to 12 times a month. Currently, a City collection vehicle currently drives by your home 10 times a month – 8 times for refuse and 2 times for green waste. The proposed curbside recycling program will require 2 more collections per month which means an extra two trips to provide the current level of service. By reducing refuse collection to once a week the number of trips remains the same. The question is whether recyclers or large garbage producers should pay for the extra service. The proposal of the additional fee of \$10 for a second pick up recognizes that the large garbage producers or those that do not want to participate fully in the City's recycling programs would bear the cost.

### *Comparison with Other Islands and Programs*

Solid waste services on the other islands vary. For example, Maui County has once a week pickup for \$12 per month that may be increased to \$16 per month (if approved by

the Maui County council this month). An additional fee of \$17 per month is charged for curbside recycling and there is no curbside bulky item pickup service. Kauai County has a once a week free curbside refuse collection with all other services paid for by the consumer. It has no bulky item pickup service. Hawaii County provides no collection services. All collection services must be contracted with private companies or residents self-haul their trash to transfer stations. The City and County of Honolulu currently has curbside refuse pickup two times a week, island-wide bulky waste pickup, and curbside green waste pickup twice a month.

The proposed curbside recycling program seeks to increase participation and uses the concept of the 3C's (Commitment, Convenience, Cost) to make the 3R's (Reduce, Reuse, Recycle) most effective.

The proposed program is not unique to Honolulu. The Consultant shared examples of other locations where recycling efforts have been successful. For example, San Francisco, California uses three carts for refuse: blue cart for glass, plastic, cans, foil, paper, and cardboard (recyclables); green cart for yard trimmings, food scraps, and soiled paper (green waste), and a black cart for non-recyclable, non-compostable refuse. Residents pay a \$19 monthly refuse fee and are provided 32-gallon carts as opposed to our 96-gallon cart. Another example is Tacoma, Washington where there the cost increases (i.e., \$16.69/month for 20-gallon container to \$41.85/month for 90-gallon container) as the size of the garbage container increases. There is no additional charge for green waste and mixed recyclables, which are collected on alternating weeks.

#### *Potential Effectiveness of Other Proposed Programs on Material Recycling*

The Consultant explained that the current recycling rate of 35% can potentially be increased to 46% by optimizing the performance of existing programs (+6%), instituting the Mayor's proposed curbside mixed recyclables collection (+2%), and additional green waste collection (+3%). However, increasing recycling does not eliminate the need for more waste-to-energy capacity. Additional waste-to-energy capacity is needed. H-POWER was built in 1989 and has continued to perform beyond contract capacity (562,000 tons). Capacity limitations have required H-POWER to divert approximately 150,000 tons to the landfill in 2005. As population and commercial growth continue there is a need for additional waste disposal on Oahu. The City and County has issued a new RFP for future increased waste-to-energy processing capacity of approximately 200,000 to 400,000 tons per year.

The Consultant noted that the potential effectiveness of the proposed expansion of energy recycling will be an additional 200,000 tons of waste converted to energy. The additional energy recycling rate of 11% would increase the current 22% energy recycling rate to 33% total energy recycling rate. The combined effectiveness of energy and material recycling will increase to 79% being diverted from the landfill.

## *Comparative Benefits of Energy and Material Recycling*

Both converting waste to energy and waste to other products have benefits. They decrease our dependence on foreign markets, create jobs and keep waste out of the landfill. Globally, fossil fuels are saved and greenhouse gases aren't produced when waste is converted to energy. Natural resources are saved and the need to ship recyclables elsewhere to manufacture new products is reduced.

The facilitator announced that Q-Mark would be distributing a post-meeting survey at this time to be returned prior to the end of the meeting.

### **Questions / Discussion**

Note: Those questions with answers in bold denote questions answered by the City after the meeting – questions that are still unanswered will be answered within a month of the meeting date

Q: How much energy does it take to start H-POWER – what are the fossil fuel needs?

A. HPOWER utilizes Municipal Solid Waste (MSW) to fire its boilers making steam to power a turbine-generator contributing 4.5% of Oahu's electrical power needs. Under what circumstances does HPOWER use oil to fire the boilers? Oil is used to ignite the waste fuel and is shut off as soon as the waste-fueled fire is self sustaining. HPOWER produced 387,852 megawatts (387,852,000 kilowatts) of electrical power during 2006. It combusted 522,161 tons of refused derived fuel (RDF) using 1,880 barrels of oil to ignite the waste fuel resulting in the avoidance of combusting 522, 161 barrels of oil to make the like amount of electrical energy. In calendar 2006 oil used to ignite the cold fuel used in making steam was less than 1% (0.36%) of the calculated barrels of oil needed to make a similar amount of electrical power.

C: The H-POWER operation nets the City and County of Honolulu \$8 million dollars per year.

Q: What is the reason for providing three containers to each household?

A: The three containers will be used to separate out the different types of refuse (non-recyclable garbage, recyclables and green waste) and to decrease confusion.

Q: Why not put the refuse in trash bags?

A: The City is trying to automate this service, which costs less and decreases worker injury. The City uses trucks specifically designed to pick up 96-gallon containers. In this way, only one person crews are needed. Manual crews that pick up refuse in trash bags are composed of three person crews.

Q: Will there be a way to dispose batteries and household hazardous waste?

- A: Residents will need to separate their refuse. The City will continue quarterly events for household hazardous waste disposal. Residents can call the Recycling Division for more information.
- Q: Regarding the pie chart in the handout: What are the materials that cannot be combusted composed of? What is the 15% ash?
- A. Materials that can not be combusted consists of mixed metals, glass, other inorganics (gypsum board, asphalt roofing, asphalt paving, concrete, sand, soil, rock, dirt, ceramics, miscellaneous inorganics), batteries, furniture, appliances, e-waste, auto fluff, treated wood, stumps, food, textiles, carpet, miscellaneous organics, sludge, other household wastes.  
The ash is the by-product of H-POWER incineration.
- Q: What is the City's timeframe for implementing this curbside recycling project? If the Charter amendment was effective in January 2007, when will it be up and running?
- A: Once the 7 community meetings are completed, the City will identify the areas that it will start up the project. The City is considering either Hawaii Kai, Mililani, or Kailua as possible start-up communities and has set the target start date for September 2007.
- Q: Is there a projected island-wide start date?
- A: Not at this time. Depends on how pilot goes.
- Q: Residents have a lot of green waste. What happens with the green waste that doesn't fit in the green waste container?
- A: Green waste will need to be cut in order to fit in the containers. Residents can use their gray refuse container for additional green waste subsequent to filling the green container. The City also has convenience centers where green waste can be dropped off.
- Q: Could there be a community recycling center for items such as used oil?
- A: **This is difficult because of the issue of contamination - when service stations implemented taking used oil this was the problem that stopped the program – suggest you use oil collection boxes – you can purchase at any auto parts store.**
- Q: Why didn't the City continue the other curbside recycling initiative?
- A: The unions blocked this from moving forward.
- Q: How will mixed recyclables be collected (i.e., food, other materials)? Concerned about food contamination.
- A: **We are not suggesting residential collection of food waste at this time. Glass, plastic and aluminum collected with the mixed recyclables should be rinsed before recycling to remove any residue. Mixed recycling is a more efficient and convenient way of collecting recyclables than single stream recycling**

**where items are placed in separate bins. However, this method can increase contamination of paper by food or breaking glass, thereby reducing the potential value of the paper. The City has guidelines on how to properly prepare your recyclables prior to disposal.**

Q: There is a problem related to pickup of bulky items/junk off the streets. Even with existing bulky item pickup there is still a lot of junk out there. How does the City plan to control this problem?

A: **The City is working with individual households to educate them to put their bulky items out on the curb at the appropriate time which is the evening before the collection day – if you have specific concerns you can call the Honolulu Collection Yard at 832-7840 – for other areas of the island phone numbers are posted online at [www.opala.org](http://www.opala.org) in the contact us section.**

Q: Is the City considering plasma arc technology as an alternative technology?

A: **As of this time, there is no plasma arc facility accepting municipal solid waste in the quantity necessary to address Honolulu’s need. The City has an RFP out for a waste to energy technology and will look at any type of proposal that meets the criteria set out in the RFP.**

Q: What is the environmental impact of H-POWER on the air, water, and land? Also, what is the impact of the ash to the landfill?

A. According to the U.S. EPA, nearly one ton of CO<sub>2</sub> equivalent emissions are avoided for every ton of municipal solid waste handled by a waste-to-energy plant due to the following:

Avoided methane emissions from landfills. When a ton of solid waste is delivered to a waste-to-energy facility, the methane that would have been generated if it were sent to a landfill is avoided. While some of this methane could be collected and used to generate electricity, some would not be captured and would be emitted to the atmosphere.

Avoided CO<sub>2</sub> emissions from fossil fuel combustion. When a megawatt of electricity is generated by a waste-to-energy facility, an increase in carbon dioxide emissions that would have been generated by a fossil-fuel fired power plant is avoided.

Avoided CO<sub>2</sub> emissions from metals recycling. Waste-to-energy plants recover more than 700,000 tons of ferrous metals for recycling annually. Recycling metals save energy and avoids CO<sub>2</sub> emissions that would have been emitted if virgin materials were mined and new metals were manufactured, such as steel.

HPOWER emissions comply with the EPA’s most stringent standards. All waste-to-energy facilities, including HPOWER, comply with the EPA’s Maximum Achievable Control Technology (MACT) standards. After analyzing the inventory of waste-to-energy emissions, EPA concluded that waste-to-energy facilities produce electricity “with less environmental impact than almost any other source of electricity”.

## Air

Air emissions from HPOWER are tested by an independent, qualified testing company on an annual basis. The positive results of HPOWER'S 2006 Air Emissions Testing are available from the Hawaii Department of Health, Clean Air Branch and in R.W. Beck's Final Report Comparison of Select Materials and Energy Recycling Scenarios dated April 2007. HPOWER successfully completed air emissions testing for 2007 at the end of April and the results should be presented to the DOH within 60 days.

HPOWER'S Clean Air Permit also requires 24-hour monitoring of EPA defined air pollutants using a Continuous Emissions Monitoring System (CEMS). The CEMS is required to be calibrated daily and undergo quarterly operational checks. Any deviations from the Air Permit Emission Limits are promptly reported to the DOH.

HPOWER is in the permitting and procurement stage of replacing the existing Electrostatic Precipitators with "State of the Art" Bag-houses to ensure it meets the new MACT standards for Air Emissions that will be required in 2009.

## Water

HPOWER is sited within Campbell Industrial Park where there is no potable water reservoir located below that land. Under HPOWER'S Storm Water Permit it practices good management practices (GMPs) ensuring no contamination of storm water runoff into the ocean. The facility collects storm water samples during large storm events to test for parameters set forth in the storm water permit. The facility conducts semi-annual inspections to ensure GMPs are implemented effectively and are working as designed. Active monitoring of potential storm water pollution sources from the facility facilitate a continuous improvement process that improve the GMPs currently employed.

## Land-filled Ash

The City's municipal landfill, Waimanalo Gulch, is operated under a Solid Waste Permit issued by the State Department of Health, Solid Waste Branch. This permit sets out the requirements to ensure it is operated in an environmentally sound manner. At HPOWER MSW is reduced by 90% of its original volume with the residual ash deposited in the prescribed Monofill section of the landfill. This Monofill employs a protective barrier liner like all modern landfills. Moisture that accumulates at the bottom of the liner is collected and sampled for pollutants by the landfill contract operator as required under the Landfill's Solid Waste Permit. HPOWER ensures that all its ash is non-toxic and meets U.S. EPA requirements prior to leaving the facility's site. Sixteen years of quarterly testing continues to determine that HPOWER'S ash is non-hazardous.

Compared to the alternative of placing 10,400,000 tons of MSW (10 times the volume of ash placed in the landfill), 224,000 tons of ferrous and 19,000 tons of non-ferrous metal in the landfill in its raw form, depositing HPOWER ash in the landfill has had an overwhelming positive effect on the landfill.

- Q: Is there any problem with recycling or reusing the ash?  
A: **The City continues to work with the DOH on a reasonable program for reuse of the ash. The downramp at the H-POWER plant was paved with “asphalt” numerous years ago as a demonstration project for reutilizing ash in road pavement.**
- C: Need to recycle refuse wherever possible rather than burn.
- Q: Is the City and County of Honolulu on contract with H-POWER? Is it obligated to provide refuse to H-POWER?  
A: **The operation of H-POWER are contracted by the City – the City is obligated to provide 561,600 tons of refuse annually**
- C: Producing energy on-island is more economical than importing fuel.
- Q: Why can't the green waste be used to create ethanol?  
A: Fermentation process requires grains. It is not efficient to use green waste to produce ethanol.
- Q: Why not explore other alternatives besides H-POWER?  
A: The City has issued a Request-for-Proposal (RFP) and will accept any process that meets the criteria.
- Q: How can we get a copy of the R.W. Beck study?  
A: The report can be downloaded online from the website: [www.opala.org](http://www.opala.org)
- Q: Has the City looked for businesses that are turning mixed recyclables to other materials instead of shipping them elsewhere?  
A: The problem is that there is an insufficient amount of “feed stock” to enable these businesses to operate at an efficient economy of scale. Businesses are small scale cottage operations.
- Q: Will there be an administrative problem determining which residents are participating in the different options that will be offered by the City?  
A: The City will develop a system to address this matter such as placing large stickers on residents' bins if they are paying the \$10/month fee.
- Q: What is being done with the State?  
A: The City and County is working towards the 21<sup>st</sup> Century Ahupua`a planning process currently take place across the State.
- Q: Has the question of mandatory versus voluntary recycling been addressed?  
A: **It has been discussed but no decision has been made**

- C: Concern regarding taking away green waste in bags versus container - Non-automated versus automated. Green waste takes up a lot of volume in the containers.
- Q: Another concern has to do with early pickup of green waste. Residents count on a certain time for the trucks to arrive and sometimes they are early and the residents have not put the green waste out yet. How can this be addressed?
- A: Sometimes refuse trucks pick up green waste early because traffic is running smoothly. The City is working with the drivers to try to get them to be more consistent with their times. Residents can also help by putting their green waste curbside the evening before the collection day.
- C: It may turn out that mixed recyclables that are taken out the night before pickup may be snatched in order to get redemptions from recycling centers.
- C: R.W. Beck has a 2006 Waste Characterization Study posted at [www.opala.org](http://www.opala.org) that provides useful information.
- Q: What is the City's plan to get feedback from the community in which the pilot is started?
- A: **Surveys , evaluations, self reporting etc. - no one method has been chosen and it is likely that a variety of methods will be used**
- Q: What are the start-up costs for this project? Who will absorb these costs?
- A: The major start-up cost is the purchase of 64-gal. blue containers. The cost will be funded by the Recycling Account in the Solid Waste Enterprise Fund. Revenue for this account is generated from the 12% recycling surcharge in the landfill and H-POWER disposal tip fee.
- Q: Will there be any money paid back to residents for the recyclables they put out for curbside pickup?
- A: If the resident wants to get back money, they must take recyclables to HI-5 recycling centers. If the City bin is used there will be no money back to residents. Another option would be to take these recyclables to schools to assist them in their fundraising efforts.
- Q: What is the optimal capacity of H-POWER?
- A: **Over 600,000 tons a year**
- Q: What kinds of paper are being shipped to Asia?
- A: **Most of the paper grades collected in Hawai'i are shipped to markets in Asia, including white ledger, colored ledger, corrugated cardboard, and newspaper.**

Community Meeting on Recycling  
Kaiser High School  
April 24, 2007  
Written Comments Submitted after Meeting

Note comments are transcribed exactly as submitted

Comment Sheet 1

Have only 2 bins

- 1- 96 gal refuse
- 1 – 96 gal mixed recyclables
  1. Refuse pick up stays twice a week (no charge)
  2. Green waste pick up once a month in plastic bags (no charge)
  3. Mixed recyclables once a month pick up (no charge)

We already have HI 5 recyclable places for plastic, aluminum & glass

Per speaker you can have more than 1 bin for green waste with no extra charge, than why would we have to pay an extra \$10.00 for extra pick up for refuse

Comment Sheet 2

Suggestions & Ideas

1. Pick up of once per month TRASH – big stuff is not working – it seems that TRASH is placed out curbside without regard for a schedule or moth end pick up  
If we can not practice this – how can we make any system work? We need to fix what we have – I suggest the government go on a call in for pick up and fine people who leave TRASH on the street
2. Part of recycling should be a consideration for keeping our neighborhoods looking good – part of the Hawaii allure is the beauty of the island – pick up should be limited to one or 2 days per week – no more
3. People who produce more TRASH/green should pay for more service – i.e. pay as you go!