

THE MAYOR'S COMMUNITY MEETINGS ON RECYCLING

Monday, May 21, 2007

7:00 PM – 8:30 PM

Kapolei Hale

GROUP MEMORY

AGENDA

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

Welcome and Introductions

Mayor Mufi Hannemann welcomed and thanked everyone for attending the last 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 its 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 Consultants Karen Luken and Ann Hajnosz from R.W. Beck and John Katahira from Limtiaco Consulting Grip.

Mayor Hannemann introduced Senior Cabinet and Environmental Services Department members who were present at the meeting: Department of Facility Maintenance Director Laverne Higa Nance; Department of Community Services Director Daniel Agsalog; Royal Hawaiian Band Director Michael Nakasone; Environmental Services Department Deputy Director Ken Shimizu; Environmental Services Communication Officer Ken Kawahara; Martin Okabe; Refuse Division Chief Frank Doyle; Refuse Division Assistant Chief Wilma Namumnart; Recycling Coordinator Suzanne Jones; and Office of the Mayor Aides Chrystn Eades and Greg Hirata. Others attending the meeting included Council Member Gary Okino.

Mayor Hannemann noted that the City has engaged R.W. Beck, an experienced consultant known locally and nationally for their work, to present a brief history of the City's challenges, initiatives, and proposed project that the city is about to embark on. Meeting participants were encouraged to share their thoughts, suggestions, and comments. Mayor Hannemann emphasized that the City is facing an important issue – how the City will deal with its solid waste. He noted that how the City deals with it today will impact the future, and that hopefully we leave the island we call home a better place than we found it.

Meeting Overview

The facilitator was introduced who then 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 stayed focused on the topic. The facilitator

provided an overview of the meeting that would include a powerpoint presentation by the City's Consultant and asked that questions be held until after the presentation when time would be provided for questions, answers, and comments. The facilitator introduced the recorder and noted that comments made at these meetings will be recorded by the reporter via newsprint at the front of the meeting room. She asked that the persons making comments ensure their comments were recorded accurately. The facilitator noted that input from meeting participants, including questions and answers, 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. For questions not answered this evening the City would post answers within 30 days. Also, resources, including the Consultant's studies, would be posted on the website, (www.opala.org).

Handouts provided included an overview of the powerpoint presentation on the Integrated Solid Waste Management Plan which included space for notes and a comment sheet on the last page which could either be turned in at the end of the meeting or mailed 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 provided 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.

It was also noted that the following meetings on this topic had been held Tuesday, April 9 at Mililani Mauka Elementary School, Tuesday, April 24 at Kaiser High School, Wednesday April 25 at Kahuku Intermediate and High School, Tuesday May 8 at the Mission Memorial Auditorium, Thursday May 10 at Windward Community College, and Saturday May 12 (Youth Meeting) Iolani School.

The facilitator introduced the Consultant Team which included Karen Luken and Ann Hajnosz from R.W. Beck. 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 handed to them from Q-mark Research as they entered by passing 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 O₂. 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 explained that the meeting agenda was aimed at gathering input, providing information and answers to questions relating to the City's Integrated Solid Waste Management Plan. The Consultant noted that the presentation would include where the City is currently, where it is going, and how it will get to the goal of developing a five-year Integrated Solid Waste Management Plan. This plan will include 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 and comparative benefits of energy and material recycling would be discussed.

The Goal: Landfill Diversion

The Consultant explained that material and energy recycling both aim to divert garbage from the landfill. She noted that diverted materials could be recycled into other materials or serve as feedstock to be converted to energy. Statistics were provided regarding where the City is right now and 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 or materials and kept out of the landfill. The combined landfill diversion from this recycling initiative is 57%, which is above the 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 for Waste Energy) is a waste-to-energy facility that keeps waste out of the landfill. Waste taken to H-POWER is converted into 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 (by products of waste-to-energy process) are disposed of in the landfill. H-POWER recycles virtually 100% of the ferrous/non-ferrous metals by using metal magnets and other extraction methods to keep them 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 ferrous metals. It reduces the reliance on fossil fuel by replacing 600,000 barrels or 7% of oil per year.

Material Recycling

The Consultant presented statistics on the impact of materials 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%, which is higher than the national average of

27-32%. Since the late 1980's the percent of tonnage recycled has increased six-fold by focusing on a wide variety of materials along with residential, commercial, and public/private partnerships. In 2005, the materials being recycled included 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-off programs and bottle redemption programs have significantly reduced container littering. Started in the early 90's, 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. Other residential material recycling includes appliance recycling and the conversion of green waste to compost through curbside pickups and convenience centers. The City has also addressed battery and tire recycling by banning these items from landfill disposal and requiring their drop-off at convenience centers.

The City has also focused on materials recycling by commercial businesses since 1990 by mandating all City offices recycle their office paper. By 1996, this program was expanded to all commercial office buildings. Hotels and restaurants must recycle their beverage containers. Commercial businesses must also recycle other types of paper materials (i.e., cardboard, newspaper, office paper, low grade paper) 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' food and implemented the conversion of cooking oil to bio-diesel fuel which it uses to run City vehicles.

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 for the extraction of ferrous metals. The City has contracted with Synagro to convert sewage sludge to compost or fertilizer pellets.

Strategies to Further Increase Landfill Diversion

The Consultant explained that the City wants to increase recycling further. It is now faced with developing strategies to 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. The City is looking at what can be done to get the public to recycle more and participate in the various programs that are offered.

The City is looking at ways of recycling more green waste into compost. 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 the landfill and being converted to a recyclable product that can be used by residents i.e. mulch. Other organics include food waste that is recycled through different methods. 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 to bio-diesel fuel for use by city vehicles and buses. Sludge can be composted thus diverting it from the landfill.

The City is also increasing multi-material residential recycling programs by expanding drop-off community recycling bins (i.e., multi-material bins, site rotating HI-5 fundraiser bins) locations. Many schools have multi-material recycling bins situated on their campuses as a means for fundraising. The City wants to get this program out to more schools, which will generate more monies to the school, not the City.

Proposed Curbside Recycling Program

Currently, refuse is collected two times a week and green waste is collected every other week. The proposed curbside recycling program includes once/week refuse collection and once/week recycling collection on alternating weeks. Recycling collection consists of alternating weekly pick-ups of green waste and mixed recyclables. A second 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 collection 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 how the collection service would change, including an additional green bin for high volume green waste households and an additional grey bin for high volume refuse households, collected once per week at no charge.

The Consultant cited a waste characterization study that was conducted by R.W. Beck to analyze the waste stream. The results of this study are posted at www.opala.org.

It is anticipated that the proposed program will decrease the need for second refuse collection. 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 overall collection service costs if residents elect to maintain twice per week refuse collection in addition to new curbside recycling collection. The Consultant explained that it all comes down to the number of times collection service is provided. Currently, a City collection vehicle drives by your home 10 times a month – 8 times for refuse and 2 times for green waste. The proposed curbside recycling program if second day rubbish pick up is maintained would require 2 more collections per month (i.e., 3 pickups per week – refuse, recycling, and second refuse) there by requiring collection vehicles to drive by your home 12 times per month in stead of the current 10. The question is who should pay for the extra collection? Should it be those who recycle or those who are large garbage producers who put out their garbage 2 times per week.

The proposal of the additional fee of \$10 for a second refuse pick up assumes that the large garbage producers or those that do not want to participate fully in the City's recycling programs and therefore would bear the additional cost of having a second refuse pick-up. If a resident recycles, and requires only one refuse collection, they won't have to pay an additional fee. However, if a resident is using more services, i.e. second refuse collection, they will pay \$10/month.

Comparison with Other Islands

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). An additional fee of \$17 per month is charged for curbside recycling and there is no curbside bulky item pickup. 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. 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.

Proposed Program Increases Participation

To be successful, the proposed curbside recycling program seeks to increase participation, with the 3R's (reduce, reuse, recycle). To do this there must be the 3C's (commitment, convenience, cost). For example, some people will recycle because they are committed to recycling; some are willing to recycle if it is convenient; and some will only recycle if there is an economic incentive.

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: 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 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 Proposed Programs on Material Recycling

How will these programs impact the waste stream? Where will this take us in the future? The Consultant explained that the current materials recycling rate of 35% can potentially be increased to 46% by doing what we do better. Optimizing the performance of existing programs (+6%), instituting the Mayor's proposed curbside mixed recyclables collection (+2%), and additional green waste collection (+3%) will increase the potential effectiveness of material recycling programs. However, increasing recycling will not eliminate the need for more waste-to-energy capacity. Without additional capacity, the overage must be sent to the landfill. 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 capacity on Oahu. The City and County has issued a 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.

Combined Effectiveness of Energy and Material Recycling

The Consultant explained that there is a 79% diversion rate. Of this total amount, 35% is made up of garbage that is converted to new products (i.e., current material recycling); 22% is garbage that is converted to energy via H-POWER; 11% is additional energy derived from expanded waste to energy capacity; 6% are new products that optimize performance; 3% is curbside green waste that is converted to compost; and 2% is curbside mixed recyclables that are kept from the landfill. The City needs to determine what to do with waste that cannot be converted to new products.

Comparative Benefits of Energy and Material Recycling

What this all means is that both converting waste-to-energy and waste to other products has benefits. Reducing dependence on fossil fuels can lead to reducing greenhouse gas emissions. This reduced reliance and decreased dependence on foreign markets can help to create jobs and keep waste out of the landfill. Globally, fossil fuels are saved and greenhouse gases aren't produced at as high a level when waste is converted to energy. With materials recycling natural resources are saved however there is the cost of shipping recyclables elsewhere to manufacture new products.

Sustainability, or material to energy recycling, both yield environmental benefits by reducing greenhouse gas emissions, creating energy benefits, providing landfill diversion, and economic benefits related to jobs. Both create jobs (i.e., more jobs and more higher paying jobs). Waste-to-energy provides greater benefit when considering on-island impacts. Material recycling offers greater benefit when considering off-island impacts.

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: Answers in bold denote answers that were supplied by the City after the meeting – those questions still unanswered will be answered within a month of the meeting date

- Q: What do you mean by “of certain size” as related to recycling as mandated by law by commercial businesses?
- A: Office Buildings, commercial office buildings; all restaurants and bars (glass and plastic), and food waste which is determined by the size of the business.
- C: All businesses should recycle cardboard.
- C: Need to also consider Styrofoam as a material that needs to be recycled.

- Q: Why aren't there recycling bins for used oil?
A: Oahu's waste-to-energy facility (H-POWER) is capable of handling this material. City has addressed used oil via used oil boxes that can be taken to the facility.
- Q: Need more recycling information and early education of youth about recycling – what is being done?
A: City sponsors annual Discover Recycling Fair which will be held on September 21st and 22nd at the Neal Blaisdell Center as well as other outreach programs and school recycling programs.
- C: Recycling needs to be taught to children in the classroom.
- C: The City agrees that more should be taught and scheduled a community meeting for youth on May 12th at Iolani School where this presentation was made and comments were collected from the youth. Notes of this meeting are on the website. In addition, four youth members have been appointed to serve on the Statewide Advisory Committee for Solid Waste Management.
- Q: Wouldn't it be better to sort materials that are to be recycled at the parks?
A: HI-5 has impacted the parks. The State is looking at sorting bins in public places. The City is cooperating with the State on this project.
- Q: Is there a change in plans to close the Waimanalo Gulch Landfill in 2008?
A: The City is currently seeking an extension.
- Q: Is there an alternative in case the City doesn't get an extension?
A: This should be addressed by the Solid Waste Management Plan which will be available in November 2007.
- C: The City should consider how Delaware handles its waste. There is no curbside recycling there. Instead the focus is on drop-off bins for all kinds of recyclables at different sites.
- Q: How do condominiums fit into the curbside recycling plan?
A: Condominiums have to arrange their own private pickup with outside vendors. However, the City offers assistance in setting up programs at condominiums.
- Q: What about greenhouse gas emissions?
A: Both curbside recycling and waste-to-energy avoid greenhouse gas emission.
- Q: How does this relate to the shipping of trash? Is it a done deal?
A: The City is looking at this issue. It is not a done deal. There will be public hearings and discussions on this issue in the future.
- C: There are individual homes that operate similar to "condos". Common area shared by homes. In these developments, space is limited and may not be able to

- accommodate the multiple recycling bins allotted to each homeowner. How will this be handled?
- A: The City will not eliminate existing programs. Community drop-off bins will still be made available to the public for members of the community unable to participate in curbside recycling.
- C: The City needs to encourage getting as much behavior change as soon as possible do you agree?
- A: The City agrees that behavior change is essential. It is looking at this issue and has made attempts to get a percentage of the HI-5 proceeds from the State to implement more programming. This past session, the City was unsuccessful. The City needs your assistance in getting legislation passed that provide monies to the County for the purchase of recycling bins for public places and education.
- C: After waste-to-energy conversion and recycling are optimized, the City Council is looking at shipping trash off-island as a means of landfill diversion. The City Council is open to suggestions from the public to do the right thing.
- C: I compliment the current Administration's efforts but am concerned about the rate of implementation. I believe that there are many people who are willing to participate.
- Q: Are there savings by using waste-to-energy conversions as opposed to materials recycling? Question the study prepared by Consultant.
- A: The study was done under the assumption that there would be no curbside recycling.
- Q: What about the possible \$13.6 million revenue from aluminum cans that go to H-POWER?
- A: As previously stated all metal ferrous and non-ferrous are pulled from the waste stream prior to the burn at H-POWER.
- Q: What will a resident have to do to get an additional grey bin?
- A: If the resident can demonstrate to the City that they are participating fully in the City's curbside recycling program and still need another bin for additional rubbish one will be provided.
- Q: Has the City considered the California model where disposal fees are charged when a person buys tires, batteries, computers, and other electronics?
- C: The City and citizens need to be encouraged to consider and support legislation that collects disposal fees for e-waste.
- A: The City is currently exploring these alternatives.

Q: Is the City using biodiesel fuel for its vehicles?

A: Approximately 20% of the vehicles are using biodiesel fuels.

Q: Why isn't there a more aggressive recycling program in Waikiki? Why aren't there recycling bins for tourists to use?

A: Need to prioritize and fund these initiatives the City is working with the State on these types of initiatives.

Q: What are we doing to encourage manufacturers of goods to reduce the production of more waste in the packaging they use for their products that will eventually need to be recycled?

A: The Consumer has the ultimate voice here. The City has no power to dictate to manufacturers how they package their product. We also need to focus on creating and changing the habits of consumers.

C: Government should set standards for products being purchased and look seriously at source reduction. The immediacy of this problem is related to the Waimanalo Gulch situation.

C: Attitudes need to change. I am appreciative of the city's efforts to deal with this problem and will tell others about this initiative.

Q: Why are we doing curbside recycling?

A: This initiative was endorsed by the public in the last election. Costs will be incurred to get this program going. Residents will have a choice – they can put recyclables out on the curbside or put materials out for waste-to-energy conversion.

Q: Plastic bags are not biodegradable. Has any thought been given regarding plastic bags?

A: In Hawaii, because of H-POWER, disposal issue is not as much a concern. Bags may take flight, but most are disposed of via waste-to-energy conversion.

C: San Francisco just passed an ordinance that bans use of plastic bags. Consumers can bring their own bags as an alternative to plastic bags.

C: We need to explore all options/alternatives.

Community Meeting on Recycling
Kapolei Hale
May 21, 2007
Written Comments Submitted after Meeting

Note comments are transcribed exactly as submitted

Comment Sheet 1

Unless the proposed recycling plan is compulsory residents won't follow it. (Especially) Hawaii hates change.

I would love to see the elimination of plastic bags or use of only biodegradable bags. Houston, TX City and County provided large multi layered paper bags for garbage that was picked up twice a week in the '70s. Residents did not even have garbage cans.

Safeway stores; years ago Pay 'N Save, are the only collectors of plastic bags. Why and who do they sell them to?