

Kaua'i County Integrated Solid Waste Management Plan

Solid Waste Advisory Committee

Meeting #2 – March 28, 2006

Summary Minutes

The following represents the list of individuals who attended the SWAC meeting.

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|------------------------|---|
| 1. Lane Otsu | Office of SW Management, Hawaii Dept. of Health |
| 2. Pete Manos | Kaua'i Community Recycling Services |
| 3. Steven Kau | Garden Isle Disposal, Inc. |
| 4. Jeff Kaohi | Kekaha Resident |
| 5. Diane Zachary | Kaua'i Planning Action and Alliance |
| 6. Bill Cowern | Kaua'i County Farm Bureau |
| 7. Jean Camp | Anahola Resident |
| 8. Jeff Deren | Kaua'i Island Utility Cooperative |
| 9. Allison Fraley | County of Kaua'i – Recycling Coordinator |
| 10. Larry Dill | Princeville Corporation |
| 11. Mike Furukawa | Grove Farm Properties |
| 12. Keith Nitta | County of Kaua'i - Planning Department |
| 13. Glenn Sato | County of Kaua'i – Office of Economic Development |
| 14. James Trujillo | Kapa'a Resident |
| 15. Kathleen West-Hurd | Hanapēpē resident |
| 16. Ray Maki | Permaculture Kauai |
| 17. Ron Kouchi | Kaua'i Chamber of Commerce |
| 18. Robert Craggs | R.W. Beck, Inc. |
| 19. Ann Hajnosz | R.W. Beck, Inc. |
| 20. Arthur K. Defrees | |
| 21. Connie Clausen | Kaua'i Community Federal Credit Union |
| 22. JoAnn Yukimura | Kaua'i County Council |

The following represents a summary of the meeting:

INTRODUCTION

Bob Craggs opened the meeting welcoming some of the SWAC members who were unable to make the first meeting. SWAC members introduced themselves again stating their affiliations.

Discussion on **attendance policy** was initiated by Bob. All members agreed that if you miss more than two meetings, you need to find an alternate to take your place. This was due to the fact that there are only 4 more SWAC meetings and consistency in attendance is necessary.

Meeting minutes for previous SWAC meetings will be posted on the website and forwarded to SWAC members prior to the next meeting.

Revised Planning Goal – added the words “protects County and State”.

WASTE CHARACTERIZATION STUDY

Bob Craggs explained why you need a waste characterization study and described the methodology used in the study:

- Background data was obtained from County staff to understand the flow of garbage to the various disposal sites
- Residential and commercial data were evaluated
- County and private haulers data were evaluated
- Developed sampling method that included:
 - Randomly selected loads
 - 50 samples of 200 lbs or more
 - Sorted by approximately 50 categories which were consistent with market definitions
 - Loads were taken over a 5-day period based on ASTM standards.
 - Surveyed haulers at landfill to determine generators (commercial or residential)
 - Used “cell approach” to eliminate bias
- Used Beck’s waste characterization model to determine what is being landfilled on a statistical basis

Bob handed out copies of tables that summarized the results of the Waste Characterization Study (attached). Discussion and Q&A.

- Food waste and green waste numbers are higher than most other communities’ results – probably due to hospitality industry
- A comment was made that even the residential numbers are showing high food waste.
- Question about how residential and commercial wastes were separated – Beck worked with the County to identify hauling patterns and identified residential loads vs. commercial loads. Multi-family loads could not practically be separated from the single family loads for field sorting.
- Most transfer station loads are exclusively residential. However, some small commercial loads may be included in the transfer station waste.
- Used the assumption that the split between residential and commercial loads was 45% residential and 55% commercial based on landfill data and understanding of existing collection system.
- Question about industrial waste – this does not include hotels.
- CRD is 5.9% - expected this to be high based on past studies but current results show a relatively low amount.
- Comment was made that there was a lower level of durable goods than expected.
- Sharps - .1% - equates to 85 tons of sharps (needles) dumped per year – this seems high. Needs additional review.

- ✓ ACTION ITEMS:
- ✓ Beck to review sharps numbers and provide explanation
- ✓ Beck to provide update on moisture analysis
- ✓ Allison to provide copies of results of previous waste characterization study results to compare to current results.

ALTERNATIVE TECHNOLOGIES

Bob Craggs handed out a Materials Flow Chart (attached). Four alternative waste reduction technologies are recommended for consideration based on the results of the waste characterization study. We want to narrow the list down to two technologies. The SWAC is charged with weighting the evaluation criteria to apply to this shortlist of technologies.

- Question about looking at pre-processing – are we going to look at this?
- Question about process – how can you narrow the options down before you know how much is diverted?

Bob handed out an Alternative Technologies Matrix (attached) and discussed the four technologies:

1. Anaerobic Digestion
2. Pyrolysis/Gasification
3. WTE
4. MSW composting

Discussion included the following topics:

- How do you dispose of ash from WTE? Need to permit a specific cell at the landfill.
- What are the trends in WTE? Seeing more expansion but not very many “green fields”. However, due to higher energy costs, more communities are taking a look at WTE.
- What are the environmental risks? Air and water impacts are highly regulated so risks are controlled.
- How large of a plant could be built? About 7 MW plant < 10% of KIUC’s load.
- Question about food waste compost in Waimanalo, Oahu
- How many tpd is needed for MWS composting? Depends on competition. Costs are probably more than \$60/ton.
- What are the usable by-products? Depends on source of wastes.

Bob explained the **Evaluation Criteria**.

1. Environmental impacts and regulatory considerations
2. Economics and financial considerations

3. Systems compatibility with existing/planned
4. Social and political acceptability
5. Quality of technology (commercially proven)

This will need to be re-visited after the next meeting when the focus will be on front end processing (recycling and composting).

- Question regarding **KIUC** RFP for alternative energy. KIUC has selected a company; currently negotiating, can't release name.
- ✓ **ACTION ITEMS:**
- ✓ Question regarding relative cost estimates for different alternative technologies
- ✓ What are air emissions impacts (get info from Honolulu)
- ✓ Need to email KIUC to get projections on rates (Ann)
- ✓ Comment from Lane – get more detailed info on operating expenses and regulatory expenses from Honolulu

NEXT STEPS

Next meeting scheduled for **Monday, April 24, 2006**, same time. Place is yet to be determined.

Topics to include:

1. Follow ups on Alternative Technology questions
2. Discussion of Evaluation Criteria
3. Recycling/Composting

PUBLIC COMMENTS

None