

# **ZERO WASTE CAMPAIGN MAUI**

## **IF YOU'RE NOT FOR ZERO WASTE, HOW MUCH WASTE ARE YOU FOR?**

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October 18, 2016

Testimony for Maui County Council Committee on Infrastructure and Environmental Management– Item IEM – 32 and IEM-68

Aloha Councilors:

We are writing regarding IEM-32, entitled “Green Waste Services,” and IEM-68, “AUTHORIZING COUNTY TO ENTER INTO A SITE LEASE RELATED TO AN ELECTRICITY GENERATING FACILITY AT WAILUKU-KAHULUI WASTEWATER RECLAMATION FACILITY. It is our hope that you will vote to defer or deny both items. We believe that the Council has not yet finished the work it has undertaken to review the auditor’s report on the original County/Anaergia Agreement regarding the Waste-To-Energy (WTE) facilities and programs proposed and promoted by the current County of Maui administration.

We are on the record via written and verbal testimony to the Council and its committees regarding these matters. We believe that our detailed objections to the environmental and economic dangers of this program, and the other County/Anaergia deserve a full hearing and investigation. This is the only way our community can acquire the information and knowledge necessary to support whatever decisions the Council makes.

In addition to the matters we have already included in our previous testimony these two items under discussion raise even more questions and concerns:

If the “Green Waste Services” item is approved what will this mean to the existing ECO compost operation? This successful project has diverted over 1 million tons of green waste and converted it into value-added products. In addition, ECO has generated hundreds of thousands of dollars in payments to the County. The summary of the Anaergia Project audit indicates it will cost the County money. This despite claims by the administration that the project would not cost the County anything. What does the County gain by shutting down the long-running and profitable ECO project? Where will the “waste” product of this project end up? Will this valuable material just be used as landfill cover or be just buried along with our other waste streams?

As outlined in IEM – 68 why are we considering building another industrial facility in a tsunami inundation zone?

Was the RFP written so as to favor Anaergia? How many other bids were submitted? Should this item be voted on favorably what would happen if Anaergia became unable to perform? If this occurs what recourse will the County have? Will Anaergia have the right to sell the lease? Given the complete lack of success that Anaergia has experienced with the Hawaii PUC why should we believe that they will be able to go forward with the other elements of their plans.

Is it wise for you to approve a lease before the potential lessee has completed an Environmental Assessment, (EA) and a Shore-line Management Assessment (SMA).?

The WTE proponents have said for 3 years that they are negotiating “off-take” contracts for the products of their WTE program. Even given the small number of prospective users/off-take partners, how can this process go on so long with not a single signed customer?

The current County administration has demonstrated over the past several years that they are committed to eviscerating our successful recycling programs. They believed that their actions would result in failure of remaining programs and success for their WTE plans. Mauians have demonstrated their commitment to recycling. With this in mind we hope that your deliberations on these issues will be complete, fair and will help guide the administration to a more sustainable, environmental and fiscal future.

Thank you for the opportunity to comment on these important issues. More information is available on our website at <http://www.zerowastemaui.net>.

Jeff Stark

Publisher, zerowastemaui.net



SIERRA CLUB OF HAWAII RECEIVED  
MAUI GROUP

2016 OCT 27 AM 10: 48

MALAMA I KA HONUA  
Cherish the Earth

October 25, 2016

OFFICE OF THE  
COUNTY COUNCIL

To: Infrastructure and Environmental Management Committee Members Elle Cochran, Riki Hokama, Gladys C. Baisa, Robert Carroll, Stacey Crivello, Don S. Guzman, Mike White, Don Couch, and Michael P. Victorino

**Re: IEM-68 Authorizing County to Enter a Site Lease Related to an Electricity  
Generating Facility at Wailuku-Kahului Wastewater Reclamation Facility**

Aloha mai kākou,

The Sierra Club Maui Group has a great deal of apprehension regarding the proposal of an electricity generating facility at the Wailuku-Kahului Wastewater Reclamation Facility (WKWRF). Our main concerns are as follows:

**1. Cost:** Initially, Maui County would pay for electricity at a rate close to that of today's oil-based electricity from MECO, but with a contracted rate increase of 2.2% per year for twenty years. Without a doubt, within five or ten years the county will be kicking itself for committing to such an exorbitant price for electricity as the cost of renewable energy continues to fall (and solar is already well below even the starting price).

At face value, the proposal may sound economical because Anaergia and its subsidiary assume the cost of building the power plant. However, there is no reason to consider Anaergia to be a charitable organization. Its calculation of the charges to Maui County are based on recouping the \$20M construction costs, costs for permitting, costs for running the plant for 20 years (including energy crops), and profits. Rather than a great deal, this can be considered a loan at very high interest to the county. If the project made sense for other reasons, it would be more cost-efficient to issue a bond or seek grants and finance it without contracting Anaergia.

**2. Location:** There was agreement at the hearing, including by Director Stewart Stant, that the location which would host the power plant, being at sea level and in a tsunami zone, is a poor choice. The county has been thinking about moving the WKWRF inland. Director Stant said it is more urgent to move the

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Wailuku Pumping Station, which supplies waste to WKWRF, than to move WKWRF itself. However, one does not exclude the other. Adding a power plant to the existing WKWRF means, 1) it will be much more difficult to move WKWRF, and 2) it can't be moved until 20 years after the power plant is online (which itself is likely years away).

**3. Green Waste Disposal Costs:** Currently, EKO collects and combines green waste with sludge to produce compost, which it then sells. Removing the lucrative sludge element from the county's contract with EKO may cause EKO to terminate its remaining green waste contract, as green waste alone has very little resale value. The county would need to contract with a new entity that will collect only green waste; this entity will likely charge a *much* higher rate per ton because the new entity will need to apply for permits, as well as provide its own location and industrial equipment because EKO's current location may become a landfill site; with the resale value of green waste so low, the entity will need to charge sky high prices to make a profit. We urge you to pay close attention to the timeline of when EKO's contract may terminate and when the county could feasibly have a replacement green waste collection entity online. By state law, green waste is not allowed in the landfill, so the county cannot throw away green waste while waiting for a new composting program to come online.

**4. Alternatives:** Director Stant said that the reason for proposing the electricity generating plant for the WKWRF instead of the Kihei Wastewater Reclamation Facility is that the Kihei facility already has an excess of solar power during the day but has no way to store the power for use in the evening and at night. A much more cost-efficient investment would be to add battery storage to the Kihei facility. Combining solar and storage at Kihei could be a pilot project which could then be replicated at the other facilities.

**5. Community input:** County's Corporation Counsel said there is no room for public input during contract negotiation for services (which she said is 95% done). However, collecting public information and input only after a contract is finalized is an expensive and cumbersome model which generally leads to community dissatisfaction.

We urge you to take these concerns into account and find out the *true* cost of this project to the county.

Me ka 'oia'i'o,

Rob Weltman, Acting Chair, Sierra Club Maui Group

Adriane M. Raff Corwin, Sierra Club Maui Group Coordinator

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✓

IEM-68 ✓

## IEM Committee

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**From:** Bob King <bking@biodiesel.com>  
**Sent:** Sunday, November 27, 2016 4:05 PM  
**To:** IEM Committee  
**Subject:** Testimony IEM 68  
**Attachments:** Maui Co Council IEM 68 11 27 16.pdf

Please enter my testimony for the November 28 meeting at 1:30PM.  
Mahalo,  
Bob

### Robert King

President

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**November 27, 2016**

**Testimony on IEM-68**

**Opposed**

Infrastructure and Environmental Management Committee  
Chair Elle Cochran  
Vice Chair Riki Hokama

Dear IEM Committee:

Please accept my testimony on behalf of Maui-based Pacific Biodiesel Technologies in opposition to IEM-68, albeit with frustration as many of the business details of the proposal in question are not available for public review. This is of concern since the general public will not be able to verify whether the proposal is in our best interests. I am especially troubled by the few points, which are public.

1. The proposed power purchase agreement with the County, as discussed at the October 19, 2016 IEM meeting, was \$0.2948 per kW hr with an annual increase of 2.2% for 20 years, resulting in a final cost of \$0.4458 per kW hr at year 20. As we have seen over the last five years, power production costs from renewables have been going down annually. At best it would be questionable economics to lock into a 20-year contract at the above price point.
2. If firm renewable power is the desire of the County, there is another economically viable option. The Kahului Wastewater Treatment Plant already has a county-owned 1.5MW diesel generator installed on the site which can use 100% biodiesel, a locally produced renewable fuel with many opportunities for promoting diversified agriculture in Maui County. At the current cost of biodiesel, this generator could produce the 550 kW load (per Mr. Stant 10/19/16 IEM minutes) required by the facility at a cost of \$0.1979 per kW hr. If this price increased the same 2.2% per year for the 20 years of the contract, the County would spend \$22 million on power, compared to \$32 million with the proposed power contract under consideration today.
3. The price savings I quoted above assumes that no other renewables are used, although the biodiesel generator can easily be supplemented by wind or PV power. An excellent hybrid design would use PV during the day, wind anytime it is available, biodiesel during evening peak power rates, and if desired, MECO's mixed source generation whenever they have additional capacity available at favorable rates to the County. The savings with this hybrid model should be even more than the previous \$10 million savings estimate.

There are other details in Anaergia's proposal that need to be vetted, such as tipping fees, crop production costs, contract contingencies and defaults, land and tsunami zone issues, etc. As far as sludge drying, the true savings over the EKO Compost contract cannot be known unless the County also offers a 20-year composting contract in which the vendor can amortize costs over the same extended period. An independent engineering consulting firm can help the Council with these technical issues if there is a desire to proceed. Many of these issues may be vetted for the Council if the complete proposal is made available for public review.

Thank you for your time. I am available to discuss the issues further if desired.

Mahalo,

A handwritten signature in cursive script, appearing to read "Robert O. King".

Robert King, President  
Pacific Biodiesel Technologies, LLC

**IEM Committee**

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**From:** Lorraine Zane <kulazane@hawaii.rr.com>  
**Sent:** Monday, November 28, 2016 9:32 AM  
**To:** IEM Committee  
**Cc:** Lorraine Zane  
**Subject:** Lease of Land at Kahului WWTF

Attn: Elle Cochran, Committee Chair

### Questions and Concerns Regarding Proposed Lease of Land at Kahului WWTF

1) Construction of any new facilities in the tsunami tidal inundation zone should be questioned carefully. How can a 20-year lease in this area be deemed wise?

The position taken by the Council and administration is that it is too expensive to move the current WWTF to a safe, mauka location. Instead, the County has continued to spend funds to retrofit the facility to make it more resistant to impacts of sea level rise and tsunami waves (fortifying existing revetment, securing chlorine tank storage). However, a tidal event of the magnitude of ones that hit Hawaii in 1946 and 1960 could severely impact the Kahului WWTF and leave Central Maui with an emergency situation and no Plan B. Like all structures built in the shoreline area (roads, hwy's, homes, condos, etc.) any plans for new facilities associated with this facility should focus upon planned retreat, not addition structures added in this tsunami inundation zone.

2) If fixed electrical cost from renewable sources was a goal of the RFP, why did DEM cancel the contract with Haleakala Solar to install ground-mounted solar PV at Kahului WWTF, which would have resulted in far greater cost savings than the 30 cents/kwh in the proposal, and far less investment in construction?

The previous director of DEM canceled the contract after it was signed, after incurring \$75,000 in design studies performed by Haleakala Solar (still unpaid by COM). What explanation was given for the cancellation? Solar PV PPA's at many County-owned facilities have helped the COM achieve savings of around \$0.5M annually, or \$10M over the 20-year life of the projects. Also, there are no emissions to be managed, as there would be with the gas turbines, anaerobic digestion and sludge drying facilities proposed. And solar PV PPA's can easily be constructed in the 18-23 cents/kwh range, providing far more cost savings than the proposal.

3) What is the proposed end use of the dewatered sludge?

It has been suggested that one use of dewatered sludge might be as landfill cover. This would be a step in the wrong direction, since we would be landfilling something that is currently diverted.

4) What consideration has been made for the co-composting now being done by EKO compost, if biosolids are not provided?

For the past two decades, EKO Compost has provided nutrient-rich compost through their contract with COM, with applications for wide use. Minus the biosolid component, EKO or another green waste processor would essentially be left with wood chips or mulch, a far less desirable end product. It is likely that any green waste processor would raise the current bid of \$30/ton for green waste to something much higher, since revenues would be minimal.

5) How can the COM/DEM promise sewage sludge to the proposer of the project, given that it is already part of the Anaergia contract to process all materials currently received at Central Maui Landfill?

On page 6 of the RFP, 1.2.22 stipulates that the Proposer will have no interests which, "conflict in any manner or degree with the performance of services required....under the contract." If any other entity had answered the RFP, there would have been a fundamental flaw in the County's ability to promise the sludge to two facility operations. The fact that Anaergia was the only respondent to the RFP raises suspicion that it was designed as a sole source. This brings about serious ethical questions.

6) What consideration has been given to public outreach, to avoid criticism down the road that the community was never invited to comment on the project before a lease was signed?

To date, the only discussion of the proposal has taken place in County Council chambers. Numerous other projects undertaken by DEM have conducted public hearings or meetings. Why not this one? Why no press release to the Maui News when the RFP was issued, such as DEM did regarding the landfill gas to energy RFP in 2012?



7) How does the proposed project conform to the Integrated Solid Waste Management Plan?

8) How does the proposed project conform to the Maui County General Plan?

9) When does DEM estimate that the Kahului WWTF will be phased out and a new facility constructed outside the tsunami inundation zone?

10) What consideration was given to other renewable energy sources, and to other solutions to reduce and fix energy costs? Why was this technology chosen above others?

11) What options were explored in reducing hauling and disposal costs for sewage sludge, given that the current \$103/ton rate (\$83/ton, previously) in the EKO contract was calculated to help amortize the high cost of a tub grinder over the shorter contract lifetime, according to testimony by Tom Pawlish?

## IEM Committee

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**From:** Jeff Stark <jstark@maui.net>  
**Sent:** Monday, November 28, 2016 8:18 AM  
**To:** IEM Committee  
**Subject:** Testimony  
**Attachments:** notodriedsludgelet.doc

Aloha:

Please distribute the attached to all committee members. Please call me at the phone number below if you need any further information.

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# **ZERO WASTE CAMPAIGN MAUI**

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November 27, 2016

To: Maui County Council Members of Infrastructure & Environmental Management Committee

**RE: Item (IEM-68) -- AUTHORIZING COUNTY TO ENTER INTO A SITE LEASE RELATED TO AN ELECTRICITY GENERATING FACILITY AT WAILUKU-KAHULUI WASTEWATER RECLAMATION FACILITY**

**Dear Committee members:**

We are writing to ask you to refer this item to the Council Chair for the term beginning January 2, 2017. We think there are compelling reasons to carefully consider this resolution before acting on it. We also believe that consideration of this resolution should be conducted at the same time that the audit of the Administrations' waste-to-energy is conducted.

There are several issues and questions related to this resolution that should be discussed. As we understand it this project would replace, in part, the current work conducted by Eko Compost. This company now has nearly two decades experience on Maui. They manufacture value-added compost and soil amendments from Maui's sewage sludge and green waste. So far this project has diverted over one million tons of what were formerly "waste" products here on Maui and which were landfilled prior to this project going online. This project is also a powerful economic development effort. Over a dozen Mauians are employed by Eko Compost. Their products are constantly in demand and dozens of Maui businesses, schools, resorts, government agencies, and landscapers utilize their products.

We believe that this project will result in what could be a fatal blow to the existence of Eko Compost. We believe that the "product" produced by this company will now be landfilled, used as "daily cover." It will increase existing dust and odor control efforts at our landfills, not to mention an increase in costs. We believe this program is designed to be a component of the Administrations overall waste-to-energy program and should be investigated as such.

Please refer this item and give us all a chance to find out more about this proposal.

**Jeff Stark**

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