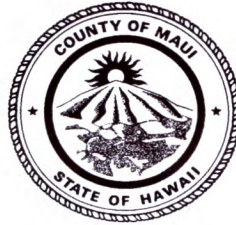


ALAN M. ARAKAWA
Mayor
STEWART STANT
Director
MICHAEL M. MIYAMOTO
Deputy Director



MICHAEL P. RATTE
Solid Waste Division
ERIC NAKAGAWA, P.E.
Wastewater Reclamation Division

**COUNTY OF MAUI
DEPARTMENT OF
ENVIRONMENTAL MANAGEMENT**
2050 MAIN STREET, SUITE 2B
WAILUKU, MAUI, HAWAII 96793

April 20, 2016

Mr. Sananda K. Baz
Budget Director, County of Maui
200 South High Street
Wailuku, Hawaii 96793

Honorable Alan M. Arakawa
Mayor, County of Maui
200 South High Street
Wailuku, Hawaii 96793

For Transmittal to:

Honorable G. Riki Hokama
Chair, Budget and Finance Committee
Maui County Council
200 South High Street
Wailuku, Hawaii 96793

Dear Chair Hokama:

SUBJECT: FISCAL YEAR ("FY") 2017 BUDGET (EM-3) (BF-1)

The County is in receipt of the above Budget and Finance Committee requested information dated April 7, 2016. Your questions and the corresponding answers are provided below.

1. *"Provide the monthly rent for each facility, by program."*

Administration Program: The current base rent and Common Area Maintenance (CAM) for Main Street Promenade Suite 2B including General Excise Tax (GET) is \$6,189.86.

Wastewater Administration Program: The current base rent for One Main Plaza Units 610 & 625 including GET is \$15,180.37. The current CAM including GET is \$8,334.32

Solid Waste Administration Program: The current base rent and CAM for One Main Plaza Unit 200 including GET is \$11,653.47. The current base rent and CAM for One Main Plaza Unit 225 including GET is \$10,516.81.

Solid Waste Operations Program: The current base rent for storage space at Kahului Trucking & Storage Unit E including GET is \$1,458.32.

OFFICE OF THE
COUNTY CLERK
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RECEIVED

APPROVED FOR THE
Mayor
4/20/16

Environmental Protection & Sustainability Program: The current base rent and CAM for 2145 Wells Street Unit 103 including GET is \$3,095.45.

2. *"Provide the scope of work for the grant to Community Work Day Program (now known as Malama Maui Nui) from the General Fund (index 919010B, sub-object 6317, page 5-8 of the Budget Details) and from the Highway Beautification and Abandoned Vehicle Revolving Fund (index 101255B, sub-object 6317, page 5-137 of the Budget Details)."*

Attached is the overall goals and objectives for Malama Maui Nui. The subject grants are used to support them.

3. *"Provide an itemized list of expenditures for Computer Services (index 919005B, sub-object 6110, page 5-18 of the Budget Details) for FY 2017."*

Per the Department of Water Supply, the FY 2017 cost to process and collect sewer user fees will be \$692,340.

4. *"Provide the status of any approved budget appropriations in FY 2015 and FY 2016, to date, for the capture of gases from existing landfills."*

Contract C-5666 with Cornerstone Environmental Group for landfill gas monitoring, inspection and reporting is appropriated for the management of the landfill gas collection and control system from Central Maui Landfill. Contract also includes decommissioning of passive gas systems at the closed Makani and Olowalu Landfills. FY 2015 and FY 2016 expenses paid on the contract are \$302,799 to date, with anticipated expenses of \$161,100 for the remainder of FY 2016.

5. *"Provide the number of workers' compensation claims filed by your Department, by program."*

In calendar year 2015 we had 18 claims, 1 in the Administration Program, 8 in the Wastewater Reclamation Operations Program, and 9 in the Solid Waste Operations Program. In calendar year 2016 to date we've had 3 claims, 2 in the Wastewater Reclamation Operations Program and 1 in the Solid Waste Operations Program.

6. *"As it relates to residential refuse collection:*
 - a. *How do you define and count "routes" for purposes of residential trash collection? Please explain."*

Routes are agreed upon between the County of Maui and the United Public Workers Union through a collective bargaining agreement. Currently, an "automated collection route" is defined as having a maximum limit of 1,000 accounts serviced per day. A "manual collection route" is one with a maximum limit of 1,750 accounts serviced per week. The County does have the right to exceed the limit on the manual routes and it requires providing compensation to the employees for every unit above the 1,750 units.

- b. *"Provide the number of routes operated daily and the number of accounts per route. Include the number of missed routes for FY 2016, to date."*

There have been 20 routes where trash collection has been delayed due to manpower shortages (17) and/or mechanical problems (3). A "missed" route is either picked up the next working day or Saturday.

There are 28 automated routes, 26 on Maui and 2 on Lanai. Automated routes are picked up twice a week except on Lanai, Monday/Thursday and Tuesday/Friday. Drivers work 4 10-hour days. For Maui, an average weekday has 13 automated routes with an average of 815 accounts per route. Lanai has 2 automated routes with an average of 364 accounts per route.

There are 23 manual routes, 21 on Maui and 2 on Molokai. Manual routes are picked up once a week. For Maui, excluding Hana, there are 20 routes averaging 190 accounts per route. Hana has one manual route with 182 accounts and Molokai has two manual routes with an average of 256 accounts per route.

- c. *"Provide the amount of bins in inventory, when and how many are ordered to replenish inventory, and the cost to store the bins. Include the average number of bins needed per year."*

As of April 14, 2016 we have a total of 330 bins in storage for all automated accounts. Replacement carts are ordered in 45 foot containers, which hold up to 405 carts. Replacement carts whether they are warranty or new carts are ordered on an as needed basis. Carts in the Kahului, Wailuku and Kihei areas are beyond the warranty period. Upcountry and West Maui carts will be out of warranty in 2018.

The current base rent for storage space at Kahului Trucking & Storage, Unit E including GET is \$1,458.32 per month. Once carts are ordered, it takes around 3 months to arrive on island depending upon stock availability.

Prior to this year, an average of 800 carts per year were replaced, mostly under warranty. We anticipate more replacements out of warranty as an estimated 12,830 carts are older than the 10 year warranty period.

- d. *"As stated by your Department, the bins have a ten-year warranty. What factors are considered in determining whether to repair the bin or replace the bin? Since the inception of automated service in 2002, provide the number of bins issued, replaced, and returned to the manufacturer under warranty, by year."*

Refuse collection automated carts are only replaced when the cart is catastrophically damaged. In most instances, the Refuse Collection Section will repair carts before replacing them. The number of carts replaced from the inception of the automated collection program is approximately 5,000 carts. When the warranty period nears expiration for all carts, staff will inspect the carts and request replacements of carts and/or parts. Approximately 1,700 carts and 800 covers were replaced under warranty. Carts are not returned to the manufacturer, instead they are repurposed or recycled by others.

7. *"Provide the participation rate for the curbside recycling pilot program. Include the contamination rate of recycled material collected from the program."*

Attached is a table summarizing the results of the set out rate study that was completed in January of 2016. Also attached is a table summarizing the weights of recyclables and contamination for the curbside recycling pilot program.

8. *"Provide a list of all contracts with short description of the purpose of the contract and who the County has contracted with, by program. Include the status of the contract, indicating whether the*

contract is in the planning stages, out to bid, encumbered, closed, or any other status by which your Department tracks a contract. If the contract is not yet been encumbered, include the amount your Department still plans to encumber in FY 2016. Also provide, if any, the amount available for use in FY 2017."

Attached is a list of contracts by program with the requested information.

9. *"Provide a detailed breakdown of Contractual Services (index 919871B, sub-object 6112, page 5-124 of the Budget Details) in the Environmental Protection & Sustainability program."*

Attached is a list of contracts with the requested information.

10. *"Provide a detailed breakdown of Contractual Services (index 919509B, sub-object 6112, page 5-102 in the Budget Details) in the Solid Waste Operations Program."*

The base contracts are for LFG system and Probe and groundwater monitoring. The expansion request is for anticipated C&D material handling. Using tonnage records from Maui Construction and Demolition Landfill, in FY2017 the estimated tonnage of concrete rubble, earthen material and rock that could be processed into cover material is around 12,437 tons. The estimate to process this material into suitable cover material is \$25 per ton. Thus the expansion request of \$310,319.

Cornerstone Consultant – LFG system and Probe monitoring – Est. \$200,000
CH2MHill Consultant – Groundwater Monitoring – Est. \$237,000

11. *"Provide a detailed breakdown of Landfill Cover Costs (index 919509B, sub-object 6276, page 5-103 of the Budget Details) in the Solid Waste Operations Program."*

Rojac – Provide Cover Soil Material to Central Maui Landfill – Est. \$1,229,790

Anticipated additional cover material due to C&D material, \$318,480.

12. *"Provide a breakdown of landfill cover material purchased in FY 2015 and FY 2016, to date. Include the cost per ton and annual tonnage for each type of material purchased, for each of the landfills."*

Attached is a listing the requested information.

13. *"Provide a copy of your Department's plans to manage each closed landfill, including costs by fiscal year."*

The Solid Waste Division has a 3 phase plan:

- Phase I is to investigate, identify and prioritize areas of management needs. Phase I plans for all 4 closed landfills are completed and attached. Please refer to attachment EM-3 #13 A,B,C,D.
- Phase II is to complete the Design Bid Specifications and will be going out to bid in the coming months.

- Phase III is the actual construction and remediation work required, commencing upon contract award this fiscal year.

Post-closure care requirements for these landfills are in accordance with current regulations specified in Hawaii Administrative Rules Section 11-58.1-17, which are as follows as a minimum:

- Maintain the effectiveness and integrity of the final cover system;
- Correct the effects of settlement and subsidence;
- Repair eroded areas;
- Prevent run-on and run-off from damaging the final cover;
- Maintain and operate leachate collection and recovery systems (if any);
- Monitor groundwater in accordance with HAR Section 1-58.1-16 (if applicable); and
- Maintain and operate landfill gas collection and control systems (if any);
- Site safety, perimeter fencing and security needs.

14. *"Position DE-0057 (page 5-123 of the Budget Details) is proposed for reallocation from Recycling Specialist IV to Environmental Protection and Sustainability Division Chief. Provide the job description for the reallocated position."*

After hearing the Budget Committee's concerns with this action, we will withdraw this reallocation to a Division Chief and work with the Department of Personnel Services to develop a Landfill Diversion Superintendent to oversee the Landfill Alternatives Section and the Abandoned Vehicles and Metals Section.

15. *"Compare the amount of excess compost available this year, to date, to last year."*

Thru March, EKO Compost Facility produced approximately 17,000 cubic yards of compost in FY2016. 7,500 cubic yards of excess compost is projected and will be given to farmers through a program that EKO established, as well as provided to the Central Maui Landfill for Alternative Daily Cover.

In FY2015, EKO Compost produced approximately 21,500 cubic yards of compost and had an excess of 9,800 cubic yards of compost. Excess was handled in similar manner.

The Molokai Greenwaste Operations facility only produces mulch from the incoming greenwaste and it is not processed into compost. Mulch is available to residents for free. 100% of the mulch is utilized.

16. *"Provide the proposed rates, by type, for all projected metals for metal recycling used in calculating the FY 2017 projections."*

For metal recycling in Central area of Maui, the County has a contract with Schnitzer Steel dba Hammerhead (C5783). Estimated contract for FY17 will be \$115,000.

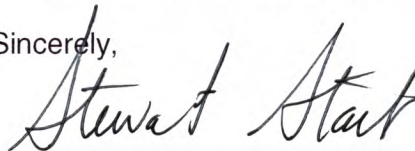
- Process Abandoned Vehicles: \$0/vehicle
- Process Freon White Goods : \$18/unit
- Process Non-Freon White Goods: \$0/unit

For metal recycling in Hana and on Molokai and Lanai, the County is currently going out to bid for the FY17 contract. Estimated contract for FY17 will be \$445,000.

- Operate Molokai Metals Facility: \$28,499/mo (vehicles, scrap metal, white goods)
- Three metals recycling events in Hana: \$24,000/event (scrap metal, white goods)
- Three metals recycling events on Lanai: \$9,500/event (scrap metal, white goods)

The Department remains available for any further information required. Thank you.

Sincerely,

A handwritten signature in black ink, appearing to read "Stewart Stant". The signature is fluid and cursive, with the first name "Stewart" and last name "Stant" clearly distinguishable.

STEWART STANT, Director
Department of Environmental Management

Attachments:

cc: Michael Ratte
James Peat
Eric Nakagawa

A. Executive Summary:

Since 1993, the non-profit organization Community Work Day Program (CWD), now doing business as Malama Maui Nui (MMN), has worked in partnership with the County of Maui to educate, inspire and empower residents and visitors alike to nurture the environment in support of Maui's ecosystems, economy, quality of life and unique Hawaiian culture of the islands. MMN is committed to pursuing the challenges Maui faces in keeping the environment clean, namely illegal dumping and littering. MMN strives to identify and address the root issues behind littering and dumping and create positive and sustainable behavior change. MMN seeks to implement an integrated approach to empower the community and foster innovative and creative methods of nurturing the environment despite dynamic environmental, economic and political conditions.

B. Need:

In the last 5 years Malama Maui Nui has helped to clean up hundreds of tons of refuse in addition to the recovery and disposal of thousands of tires, thousands of pieces of scrap metal, hundreds of appliances and more. Rather than just provide temporary solutions to the illegal dumping challenges, Malama Maui Nui seeks to create positive behavior changes that offers long-term, sustainable decreases in volume and incidents of illegal dumping and littering.

Illegal dumping and littering is the act of discarding waste in an unauthorized location such as roadways, alleys, beaches, streambeds, vacant lots or the ocean. Illegally dumped waste often contains items that are not accepted at the local landfill and require a disposal fee for proper processing such as appliances, tires, auto mobile parts, medical waste, and propane and other compressed tanks. Other commonly found materials include construction waste, green waste, furniture, household garbage and occasionally, dead animals. The aforementioned waste materials pose many threats to the health of humans and the environment alike such as an increased risk of exposure to chemicals and other harmful substances; for example, Freon from appliances, lead-acid from car batteries, automotive fluids, household chemicals, lead, asbestos and chemicals used to treat construction materials and other commercial or industrial wastes. High-level concerns include exposure to medical contaminants and preventable diseases such as dengue fever or encephalitis from disease-carrying mosquitoes and/or other illness transmitted by rodents and vermin attracted to the waste materials. Additionally, illegal dump sites increase potential exposure to sharp, rusty, metal objects that could result in injury including tetanus and/or other bacterial infections.

Furthermore, some of these wastes have the potential to ignite, either by spontaneous combustion, or more commonly, by arson, causing property damage and potentially significant environmental destruction. Locations severely affected by fire have the potential to further cause environmental degradation as a result of erosion. Maui is a small island and its landscape in close proximity to the ocean and therefore erosion/sedimentation poses a natural concern for both the source location as well as the marine ecosystem. The steep nature of the topography of the island increases the possibility of erosion/sedimentation as well as the likelihood that any of aforementioned material might contaminate our watersheds before making their way to pollute the reefs and ocean.

In addition to the environmental and health concerns illegal dumping also results in decreases in property value, negative impacts on the tourism industry and its economic influence among other economic variables. Unaddressed, illegal dumping behaviors will likely increase and the negative impacts of these behaviors will become increasingly hazardous and expensive to address.

C. Goals and Objective:

Facilitating community stewardship is an integrated approach designed to foster innovative and sustainable practices that increase the probability that the environment will be nurtured despite dynamic environmental, economic and political conditions. As described below, MMN has establish four goals to propel the organization in the direction of community stewardship. For ease of reference, please see the KMB Goals and Objectives Spreadsheet below.

Goal 1: Create a cleaner, more sustainable Maui through targeted education and outreach.

Objective 1: Increase awareness of community stewardship concepts in relation to illegal dumping and littering.

Objective 2: Promote responsible solid waste management behaviors through innovative and creative material re-use projects/events.

Goal 2: Empower individuals of the community and visitors alike to be environmental stewards for Maui.

Objective 1: Facilitate, directly and in partnership with businesses, organizations and community volunteers, community stewardship activities of local, national and international levels.

Objective 2: Support community led cleanups.

Objective 3: Foster and secure relevant partnerships.

Objective 4: Secure cash and in-kind donations to support community stewardship efforts.

Goal 3: Support Maui County in significantly reducing litter and illegal dump sites.

Objective 1: Provide reactive services in the form of reconnaissance missions and response to cleanup requests.

Objective 2: Provide proactive services that facilitate easy access to proper disposal and, by extension, prevent dumping.

Goal 4: Increase MMN's ability to effectively and efficiently determine and address litter and illegal dumping issues.

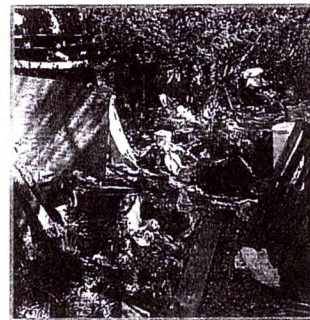
Objective 1: Develop a mapping system using geospatial technology.

Objective 2: Develop new methods of program assessment.



Site featured in photo to the left:
Off Kahului Beach Road near Y Hata.

Site featured in photo to the right:
Off Piilani Highway at Ukumehame



**Community Work Day Program
Keep Maui Beautiful**

**Malama Maui Nui
Grant Narrative FY 2017**

KMB Goals and Objectives Spreadsheet

Objectives	Delivery Plans	Metrics
Goal #1: Through targeted education and outreach, empower the community to take action towards a cleaner, more sustainable Maui.		
Increase awareness of Best Community Stewardship Concepts in relation to illegal dumping and littering.	Implement k-12 educational initiative: educational materials and presentation	Materials and presentations developed, # of events conducted, # of volunteers, # of participants, teacher/school administrator/partner feedback
	Use media outlet to educate target audience on community stewardship concepts such as the laws, statutes and ordinances associated with illegal dumping, what can be done to prevent illegal dumping, how and why individuals should get involved, and who to contact for assistance or to report an incident	# of pieces produced, hits on webpage
	Develop community stewardship training materials	Training materials produced, # of staff trained
Promote responsible solid waste management behaviors through innovative and creative material re-use projects/events	Implement K-12 educational initiative: greenhouse project	Prototype developed, materials secured, # of greenhouse panels completed, final completion of MMN greenhouse roof, school initiation of plastic bottle greenhouses or similar projects
	Host Art of Trash Event	# of volunteers, # of participants, # of attendees, attendee feedback, amount of donations generated
	Use media to promote events	# of pieces produced, hits on website
Goal #2: Empower individuals of the community and visitors alike to be environmental stewards for Maui.		
Facilitate directly or in partnership with businesses, organization and community volunteers, community stewardship activities on local, national and/or international levels	Implement Get the Drift Campaign	# of volunteers, # of community led cleanups, volume of refuse, list of items commonly found and their associated quantities, list of bulky items collected, monetary and in-kind donations
	Implement Great American Cleanup Campaign	# of volunteers, # of community led cleanups, volume of refuse, list of bulky items collected, monetary and in-kind donations
	Beach cleanups	# of volunteers, volume of refuse, list of bulky items collected, monetary and in-kind donations
Support community led cleanups	Provide supplies for groups (outside campaign periods) with a minimum of 10 volunteers and minimum volume of refuse (for trash pickup)	# of cleanups supported, # of volunteers, volume of refuse, monetary and in-kind donations
Foster and secure relevant partnerships	Host introductory meetings to foster interest in projects and partnerships	# of meetings hosted, # of participants
	Develop task force / committees and communication systems	# of meetings hosted, # of participants
Secure cash and in-kind donations	Strategically initiate, meet with and facilitate events/projects with partners/potential partners	# of partnerships secured, \$ donations secured
	Engage volunteers to assist with events and activities	Total # of volunteer hours secured, \$ value generated
Goal #3: Support the County in significantly reducing litter and illegal dumpsites.		
Provide reactive services associated with litter and illegal dump sites	Conduct Reconnaissance Missions and respond to requests to clean up dump sites	# of recon missions conducted, # of dump sites cleaned, volume of refuse, # of Freon-containing appliances, # of nonFreon-containing appliances, # of tires, # of lead-acid batteries, volume of scrap metal, GPS location of dump sites, frequency of visitation
Provide proactive services associated with litter and illegal dump sites	Facilitate Malama Aina monthly recycling events	# of events conducted, # of participants, # of volunteers, # of Freon-containing appliances, # of nonFreon-containing appliances, # of tires, # of lead-acid batteries, volume of scrap metal, amount of donations generated
Goal #4: Increase MMN's ability to effectively and efficiently determine and address litter and illegal dumping issues		
Develop mapping system using geospatial technology	Create base maps and parameters for data collection	Maps developed
	Train staff and/or partners on how to use geospatial tools to collect data	
	Collect, compile, assess and map data	
Initiate new methods of program assessment	Consult with appropriate expertise	Database developed and implemented, # of staff trained, reports generated
	Implement as per expert recommendations	
	Train staff how to use new data systems	

D. Delivery Plans:

There are a number of components involved to this integrated approach to community stewardship. In order to simplify the explanation of the implementation plans, activities have been organized under the follow headings; Education and Outreach, Cleanup Facilitation, and Program Development. For additional clarification, please reference the KMB Goals and Objectives Spreadsheet as well as the KMB Implementation Timeline at the end of this section.

Education and Outreach

Six main educational and outreach activities will be executed in response to the objectives of MMN's first goal. The first activity is to develop community stewardship training tools. These tools will be used as a broad guide for the production of the K-12 education presentation and materials. They will also be used to guide media pieces such as press releases and PSA's and referenced in meetings hosted by MMN to garner interest and partnership in MMN projects/events as a means to explain and foster support for the community stewardship approach to illegal dumping and littering. At the same time the community stewardship training materials are being produced, a prototype for the greenhouse roof panels will be produced. Upon completion of the community stewardship training materials, the education presentation and the greenhouse roof panel prototype, then the educational events will be conducted for the remainder of the fiscal year. The highly anticipated Art of Trash activities will take place in the third and fourth quarter of the fiscal year and serves as one of MMN's most creative awareness campaigns. Media pieces supporting these activities will be released when appropriate throughout the fiscal year.

Cleanup Facilitation

Actions listed under this category are designed to respond to the objectives under MMN's second and third goals. Those pertaining to the objectives under the second goal include cleanups designed to directly empower individuals. MMN will host introductory meetings to foster interest and partnerships in MMN community stewardship projects as well as host beach cleanups in the first and second quarters of the fiscal year. Overlapping the two previously mentioned activities and expanding into the third quarter, MMN will implement the Get the Drift and Bag It cleanup campaign. In the third and fourth quarters, the Great American Cleanup campaign will be conducted. During this time MMN will also be actively recruiting and securing commitment from those who had demonstrated interest at the introductory meetings held in the first half of the year to create an illegal dumping task force or similar committee. The purpose of this group is to work together, share information, avoid duplication while identifying access and contribute resources as certain partners may be eligible or better suited to provide resources than others. Ideally this group will be made up of residents, business owners, enforcement officers, hauling companies, materials processors and the like. Outcomes from objectives associated with MMN's fourth goal, will determine how this committee is further developed and what actions they will implement which is likely to run into the subsequent fiscal year. Support for community led cleanups will be conducted throughout the year as will solicitation activities for the purpose of securing partnerships and donations.

**Community Work Day Program
Keep Maui Beautiful**

**Malama Maui Nui
Grant Narrative FY 2017**

Actions pertaining to the objectives of MMN's third goal are both proactive and reactive services provided to support the county in reducing the current volume of illegally dumped materials. Activities associated with the Hot Spot cleanup services (reactive) include reconnaissance missions and response to requests for cleanup. Activities associated with the Malama Aina recycling events include facilitating this monthly event in order to provide accessible recycling services where they lack on the west side of the island in a proactive attempt to reduce illegal dumping and littering. Both of these services will be conducted throughout the entire fiscal year.

Program Development:

The six main program development activities are associated with the objectives outlined from MMN's fourth goal which is to increase MMN's ability to effectively and efficiently determine and address litter and illegal dumping issues. The development of a mapping system using geospatial technology and identifying and consulting an expert for the purpose of initiating new methods of program assessment will be initiated in the first and second quarter of the fiscal year. Once these systems are created, the staff will be trained on how to use new tools and technology and execute the new systems. Trainings associated with the geospatial technology will likely occur in the second quarter while trainings for the other systems will likely occur a bit later, presumably the third quarter. Data collection will begin after the respective training have occurred and will resume for the remainder of the fiscal year.

KMB Implementation Timeline:

Implementation Timeline	FY2017			
	1 st Qtr.	2 nd Qtr.	3 rd Qtr.	4 th Qtr.
Education and Outreach				
Develop community stewardship training tools	X	X		
Produce education materials and presentation	X			
Produce greenhouse roof prototype and secure partners	X			
Conduct education events		X	X	X
Use of media to promote events and activities (PR's, PSA's, etc.)	X	X	X	X
Host Art of Trash			X	X
Cleanup Facilitation:				
Conduct beach cleanups	X	X		
Host introductory meetings to foster interest in projects and partnerships	X	X		
Implement Get the Drift and Bag It cleanup campaign	X	X	X	
Support community led cleanups	X	X	X	X
Conduct reconnaissance missions and respond to cleanup requests	X	X	X	X
Conduct Malama Aina Recycling events	X	X	X	X
Secure cash and in-kind donations	X	X	X	X
Implement Great American Cleanup campaign			X	X
Develop task force / committee and communication system			X	X
Program Development:				
Develop mapping system using geospatial technology	X	X		
Identify and consult expert on new methods of program assessment	X	X		
Train staff and/or partners how to use geospatial tools for data collection		X		
Geospatial data collection		X	X	X
Implement/pilot new methods of program assessment per expert recommendations			X	X
Train staff on new data systems			X	

E. Evaluation:

A number of measures have been outlined to assist in the evaluation of the projects, services and events that make up this Keep Maui Beautiful grant proposal. Most include the classic metrics and can be referenced from the KMB Goals and Objectives Spreadsheet. The main metrics include how many events were conducted, how many volunteers assisted with those events, how many people participated in the events, what volume of litter was collected and disposed of, itemized list of type and quantity of bulky items collected, number of dump sites cleared, etc. As MMN seeks to engage the community in stewardship activities, the metrics listed above will provide engagement levels, provide scope as well as broad baseline data that can be used to assist in measuring long-term changes.

Additionally, it is one of MMN's high-priority objectives to initiate new methods of program assessment. The intent is to increase MMN's ability to effectively and efficiently determine and address litter and illegal dumping issues. The improved systems of measurement and data management will strengthen MMN's capacity to create and evaluate the organization's projects and services.

MMN implements activities via a project management software system in order to ensure that goals and objectives are met and that the desired outcomes are provided. In addition, the Executive Director holds weekly meetings with the Deputy Director as well as monthly meetings with the entire staff. The Board Chairperson(s) is/are apprised of the organization's operations on a weekly basis in addition to the Board meeting every other month.

2016 CURBSIDE SET OUT RATE STUDY (SOR)							
Date	# Carts on Route	Blue Cart	Green Cart	Current SOR	Current SOR per Cart	Past Total SOR	Contamination rate
1/7/2016	763	590	n/a	77%	Blue Cart SOR		18%
1/8/2016	763	559	n/a	73%	67%		18%
1/14/2016	763	n/a	390	51%	Green Cart SOR		2-3%
1/15/2016	763	n/a	456	60%	54%		2-3%
1/21/2016	763	485	n/a	63%			17.50%
1/22/2016	763	410	n/a	54%			17.50%
1/28/2016	763	n/a	405	53%			2-3%
1/29/2016	763	n/a	402	53%			2-3%
Past set-out rate					Total SOR: Green & Blue: 61%	Past SOR: Green & Blue: 54%	

COUNTY OF MAUI - 3 CAN PLAN

CURBSIDE RECYCLING

2015 Deliveries

Date	Site/Loc	Ticket #	Weight (lbs)	rubbish	%
1/8/2015	Central Kihei	68185	7,700		
1/8/2015	Central Kihei	68195	5,960		
1/8/2015	Central Kihei	68199	4,540		
		Total	18,200	3,800	21%
1/9/2015	Maui Meadow	68206	5,540		
1/9/2015	Maui Meadow	68216A (ref# 29589)	4,900		
1/9/2015	Maui Meadow	68226A (ref# 29599)	5,900		
		Total	16,340	3,500	21%
1/22/2015	Central Kihei	68477	6,100		
1/22/2015	Central Kihei	68495 (ref# 29796)	7,760		
		Total	13,860	2,800	20%
1/23/2015	Maui Meadow	68501	6,780		
1/23/2015	Maui Meadow	68507	6,020		
		Total	12,800	2,520	20%
		Jan Total	61,200	12,620	21%

deliveries ended on Jan 2015 and then resumed on August 20, 2015.

8/20/2015	Central Kihei	73016	9,300		
8/20/2015	Central Kihei	73020	3,420		
		Total	12,720	4,120	32%
8/21/2015	Maui Meadow	73039	8,020		
8/21/2015	Maui Meadow	73041	2,740		
		Total	10,760	2,920	27%
		August Total	23,480	7,040	30%

9/3/2015	Central Kihei	73327 (ref# 31342)	6,540		
9/3/2015	Central Kihei	73337 (ref# 31352)	5,240		
		Total	11,780	3,120	26%
9/4/2015	Maui Meadow	73353 (ref# 31367)	6,940		
9/4/2015	Maui Meadow	73359 (ref# 31373)	4,160		
		Total	11,100	2,880	26%
9/17/2015	Central Kihei	73609	6,640		
9/17/2015	Central Kihei	73622	4,780		
		Total	11,420	2,000	18%
9/18/2015	Maui Meadow	73633 (ref# 31487)	3,720		
9/18/2015	Maui Meadow	73639	6,320		
		Total	10,040	1,840	18%
		September Total	44,340	9,840	22%
10/1/2015	Central Kihei	73899	6,360		
10/1/2015	Central Kihei	73903	4,820		
		Total	11,180	2,020	18%
10/2/2015	Maui Meadow	73923	5,240		
10/2/2015	Maui Meadow	73931	5,460		
		Total	10,700	1,920	18%
10/15/2015	Central Kihei	74183	7,540		
10/15/2015	Central Kihei	74191	4,900		
		Total	12,440	2,060	17%
10/16/2015	Maui Meadow	74214	6,120		
10/16/2015	Maui Meadow	74218	4,860		
		Total	10,980	1,860	17%

10/29/2015	Central Kihei	74453	5,820		
10/29/2015	Central Kihei	74464	5,040		
		Total	10,860	1,960	18%
10/30/2015	Maui Meadow	74500 (ref# 31812)	7,780		
10/30/2015	Maui Meadow	74510	3,520		
		Total	11,300	2,040	18%
		October Total	67,460	11,860	18%
11/12/2015	Central Kihei	74763	6,380		
11/12/2015	Central Kihei	74773 (ref# 31904)	5,380		
		Total	11,760	2,000	17%
11/13/2015	Maui Meadow	74788	5,940		
11/13/2015	Maui Meadow	74800	5,280		
		Total	11,220	1,980	18%
11/26/2015	Central Kihei	75050 (ref# 31999)	6,300		
11/26/2015	Central Kihei	75054 (ref# 32003)	5,240		
		Total	11,540	1,960	17%
11/27/2015	Maui Meadow	75065	5,640		
11/27/2015	Maui Meadow	75079	5,080		
		Total	10,720	2,020	19%
		November Total	45,240	7,960	18%
12/10/2015	Central Kihei	75346	7,400		
12/10/2015	Central Kihei	75359	7,200		
		Total	14,600	2,720	19%
12/12/2015	Maui Meadow	75374	7,860		
12/12/2015	Maui Meadow	75381	6,480		
		Total	14,340	2,640	18%
12/24/2015	Central Kihei	75654 (ref# 32222)	5,720		
12/24/2015	Central Kihei	75675 (ref# 32244)	6,140		
		Total	11,860	2,200	19%
12/25/2015	Maui Meadow	75683 (ref# 32252)	6,020		
12/25/2015	Maui Meadow	75684 (ref# 32253)	4,960		
		Total	10,980	2,000	18%
		December Total	51,780	9,560	18%

2015 Grand Total	293,500	58,880	20%
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COUNTY OF MAUI - 3 CAN PLAN CURBSIDE RECYCLING

2016 Deliveries

Date	Site/Loc	Ticket #	Weight (lbs)	rubish	%
1/7/2016	Central Kihei	75924	4,960		
1/7/2016	Central Kihei	75933	2,820		
1/7/2016	Central Kihei	75939	4,280		
		Total	12,060	2,300	19%
1/8/2016	Maui Meadow	75960 (ref# 32362)	1,700		
1/8/2016	Maui Meadow	75961 (ref# 32363)	6,080		
1/8/2016	Maui Meadow	75973 (ref# 32374)	6,640		
		Total	14,420	2,500	17%
1/21/2016	Central Kihei	76246 (ref# 32557)	7,400		
1/21/2016	Central Kihei	76256	6,040		
		Total	13,440	2,400	18%
1/22/2016	Maui Meadow	76273	6,640		
1/22/2016	Maui Meadow	76283	6,600		
		Total	13,240	2,240	17%
		Jan Total	53,160	9,440	18%
2/4/2016	Central Kihei	76520	6,680		
2/4/2016	Central Kihei	76535	5,800		

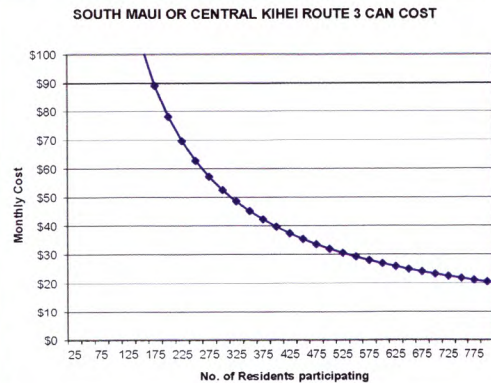
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FY15 COST ESTIMATE TO ADD ON 3 CAN PLAN (IF ADDED TO CURRENT REFUSE COST) ALL KIHAI PILOT ROUTES

Number of Refuse Accounts On A Route (max. 1,000)	750
Number of Tons of Mixed Recyclables Annually	193
Number of Tons of Green Waste Annually	383
Number of Tons of Contamination	35
Cost per Ton of Processing Mixed Recyclables	\$130.00
Cost per Ton of Processing Green Waste	\$20.00
Estimated Depreciated Cost of the Dedicated Refuse Truck	\$70,000.00
Estimated Maintenance cost for Refuse Truck	\$21,701.10
Annual Cost of Carts/Delivery/Mailers	\$20.14
Cart maintenance and repair / storage	\$10,000.00
Cost per Ton of Landfilling Contamination	\$70.00
Annual Cost of County Staff to Maintain Program	\$46,678.85
Annual Cost of County Staff to Manage Program	\$12,298.15
Annual Total Cost to Process Mixed Recyclables	\$25,120.57
Annual Total Cost to Process Green Waste	\$7,667.97
Annual Total Cost to Process Contamination	\$2,418.22
Annual Total Cost for Carts/Delivery/Mailers	\$15,105.00
Annual Cost of the Dedicated Refuse Truck	\$70,000.00
Annual Cost of maintenance/repair/storage	\$10,000.00
Estimated Annual Maintenance Costs	\$21,701.10
Annual County Staff Cost	\$58,977.00
Annual Savings for Landfilling	-\$40,364.37
Total Annual Program Costs	\$170,625.50
Inflationary cost increase over 10 year period (3% increase/yr)	\$195,603.02

Annual Program Costs per Account	\$260.80
MONTHLY ADDED COSTS PER ACCOUNT *	\$21.73

* This cost is in addition to their existing monthly refuse costs.



Input the total estimated accounts on route
 771.91 tons - Jan. 2013 to Dec. 2014 for M. M. and Central Kihei(2 yrs)
 1,531.55 tons - Jan. 2013 to Dec. 2014 for M. M. and Central Kihei(2 yrs)
 Approx. 69 tons of contamination per yr for 1,498 accounts
 Current cost/ton to process recyclables
 No cost based upon current agreement with EKO for the 3-Can Plan Pilot. A permanent 3-Can Plan may have increased cost for compost, assume \$20/ton
 Based on \$420,000 Cost and replacement after 6 years for additional truck
 Maintenance, parts, and tires (See costs below)
 per refuse account

0.2576
0.5112
0.0461

Cost of landfilling per CML Cost of Landfilling SWD Report
 Refuse Driver costs \$53k/yr + OH & Fringe of 87.39%; County subsidizes refuse hauling costs by 47% in FY 16. Hence, unsubsidized cost is added as it is not mandatory for the County to provide curbside recycling.
 Approx. \$60k/yr; + OH&F (77.64%) 20 hours per month; recycling staff

REFUSE DATA TABLE

<u>Estimated O&M</u>
\$190,000 Gasoline
\$150,000 R&M parts
\$120,000 Tires
\$460,000 per year for 23 vehicles in Wailuku Refuse, includes refuse collection vehicles, pickups and flat beds.
\$81,653 \$220k per year maintenance (Flat rate for all Refuse vehicles in Wai, Mak, Lah. Also includes Hana & Molokai Refuse truck and service) Molokai Refuse p/u \$1,745.30/wk; Hana Refuse p/u \$915.22/wk

GRADUATED COST DATA TABLE FOR GRAPH

Residents Participating:	25	50	75	100	125	150	175	200	225	250	275
Monthly cost/resident:	\$615.27	\$308.27	\$205.93	\$154.77	\$124.07	\$103.60	\$88.98	\$78.02	\$69.49	\$62.67	\$57.09
Residents Participating:	300	325	350	375	400	425	450	475	500	525	550
Monthly cost/resident:	\$52.43	\$48.50	\$45.12	\$42.20	\$39.64	\$37.38	\$35.38	\$33.58	\$31.97	\$30.51	\$29.18
Residents Participating:	575	600	625	650	675	700	725	750	775	800	
Monthly cost/resident:	\$27.96	\$26.85	\$25.83	\$24.88	\$24.01	\$23.20	\$22.44	\$21.73	\$21.07	\$20.45	

LEGEND / INFO:

Above numbers are based upon current participation rates, tonnages, contamination rates, etc.

South Maui # of accounts: 750. # of Central Kihei route: 748

COM would require all accounts or none on a route to be on the 3 can.

Participation by choice requires one additional pick up/week per route, is not operationally feasible and would require computerizing our trucks.

Wastewater Reclamation Division FY 16 Contracts

Index Code	Contract #	Amount	Description	Vendor	Status
Wastewater Administration Program					
919005B	C1609	\$26,485.44	Kualapuu Sewer Recovery	Molokai Properties	Encumbered
Wastewater Operations Program					
919029C	C5866	299,999.24	1,000 gal jetter truck	HT and T Hawaii LLC	Encumbered
919033B	C5330A	79,640.66	Polymer	Solenis LLC	Encumbered
919033B	C5803	23,550.00	Odor Control Chemicals	BEI Hawaii	Encumbered
919033B	C5804	80,910.00	Liquid Chlorine	BEI Hawaii	Encumbered
919035B	C5330A	54,300.45	Polymer	Solenis LLC	Encumbered
919035B	C5803	64,150.00	Odor Control Chemicals	BEI Hawaii	Encumbered
919035B	C5804	84,660.00	Liquid Chlorine	BEI Hawaii	Encumbered
919037B	C5330A	57,920.48	Polymer	Solenis LLC	Encumbered
919037B	C5804	56,440.00	Liquid Chlorine	BEI Hawaii	Encumbered

COUNTY COUNCIL REQUEST EM-3 ATTACHMENT 8A

SOLID WASTE DIVISION FISCAL YEAR 16 CONTRACT STATUS

PROGRAM	CONTRACT #	INDEX CODE/ SUBJECT CODE	VENDOR	DESCRIPTION OF PURPOSE	PRIOR YEAR ENCUMBRANCE	ENCUMBERED IN FY16	PLANNED FUTURE ENCUMBRANCE IN FY16	EXPENSES PAID	ANTICIPATED EXPENSES	POTENTIAL CARRYOVER R TO FY17	NOTES
SW Ops	C5333	919509 / 6143	NETWORKFLEET INC	GPS PROGRAM	1,886	0		(817)	0	1,068	PROGRAM WAS ORIGINALLY ALLOCATED TO DIVISIONS BUT NOW PAID OUT UNDER MAYOR'S OFFICE.
SW Ops	C5530	919509 / 6276 919509B / 6276	ROJAC CONSTRUCTION INC	COVER MATERIAL	1,080,000	1,080,000	230,000	(1,930,906)	(457,901)	1,193	4/8/16 - AMEND #2 IN PROCESS TO ADD \$230K.
SW Ops	C5676	919509 / 6132 919509B / 6132	CH2M HILL	CML GROUNDWATER MONITORING	170,730	101,999		(264,265)	(8,464)	0	
SW Ops	C5708	919509 / 6132	SSFM INTERNATIONAL INC	LEACHATE RECIRCULATION EXPANSION	108,500	0		(85,155)	(23,345)	0	DELAYS DUE TO DOH REVIEW, PERMIT ISSUES, CHANGE IN WORK TO ADDRESS REGULATORY CONCERNS, CHANGE IN MATERIAL LEAD TIME.
SW Ops	C5631	919521 / 6130 919521 / 6040 919570 / 6130 919521B / 6130 919521B / 6040 919871B / 6130	DIVDAT	PRINTING & MAILING OF REFUSE INVOICES	38,600	35,000		(53,495)	(18,000)	2,105	
SW Ops	C5666	919509 / 6112 919509B / 6112	CORNERSTONE ENVIRONMENTAL GROUP	CML LFG GCCS SUPPORT	266,388	232,544		(302,799)	(161,117)	35,016	
SW Ops	C5792	919509B / 6126	KA LIMA O MAUI	CML LITTER PICK-UP	0	173,000		(111,140)	(58,000)	3,860	
SW Ops	C5800	919509B / 6122	MAUI DISPOSAL CO.	OPERATE OLOWALU TRANSFER STATION	0	236,445		(128,970)	(107,475)	0	
SW Ops	C5929	919509B / 6132	SSFM INTERNATIONAL INC	CML NON-POTABLE WATER CONSTRUCTION MANAGEMENT SERV.	0	56,200		(31,904)	(24,296)	0	AWAITING MECO APPROVAL TO COMPLETE CONSTRUCTION.
SW Ops	C5966	919509B / 6112	OCEANIC COMPANIES INC	LEACHATE MANHOLE REPAIR	0	203,887		0	(203,887)	0	CONSTRUCTION COMPLETE BY APRIL 2016.
SW Ops	C5545	919511 / 6221 919511B / 6276	NABBS TRUCKING LLC	GREENWASTE HAULING TO EKO	230,160	170,000		(328,809)	(68,000)	3,351	
SW Ops	C5784	919511B / 6132&6112	CH2M HILL	HLF GROUNDWATER MONITORING	0	144,706		(81,276)	(60,000)	3,430	
SW Ops	C5799	919513B / 6276	TRI L CONSTRUCTION	COVER MATERIAL	0	182,500		(81,759)	(100,000)	741	
									TOTAL	50,765	

COUNTY COUNCIL REQUEST EM-3 ATTACHMENT 8B

ENVIRONMENTAL PROTECTION & SUSTAINABILITY FISCAL YEAR 16 CONTRACT STATUS

CONTRACT #	INDEX CODE/ SUBJECT CODE	VENDOR	DESCRIPTION OF PURPOSE	PRIOR YEAR ENCUMBRANCE	ENCUMBERED IN FY16	PLANNED FUTURE ENCUMBRANCE IN FY16	EXPENSES PAID	ANTICIPATED EXPENSES	POTENTIAL CARRYOVER TO FY17	NOTES
C4510	919533 / 6112 101150 / 6112	K S AND L S INC	TOWING FOR AV	230,000	0		(229,796)	0	205	
C4511	919533 / 6112 101150 / 6112	KITAGAWA TOWING LLC	TOWING FOR AV	33,500	0		(27,435)	0	6,065	
C4551	101150 / 6112	K S AND L S INC	AV STORAGE FACILITY	645,000	0		(611,364)	0	33,636	
G3703	101150 / 6317	COMMUNITY WORK DAY	HOT SPOT CLEANUP	120,000	186,000		(117,913)	0	188,087	
C5339	919566 / 6112 919871B / 6112 101255B / 6112	REFRIGERANT RECYCLING INC	MOLOKAI METALS	788,976	310,295	0	(898,439)	(171,000)	29,832	
C5556	101160 / 6112 101255B / 6112	ADP TOWING	TOWING FOR AV	12,000	15,000	4,000	(20,821)	(5,000)	5,179	
C5558	101160 / 6112 101255B / 6112	K S AND L S INC	TOWING FOR AV	25,000	30,000	4,000	(39,388)	(19,500)	112	
C5559	101160 / 6112 101255B / 6112	KITAGAWA TOWING LLC	TOWING FOR AV	27,000	36,000	15,000	(57,097)	(14,000)	6,903	
C5560	101160 / 6112 101255B / 6112	K S AND L S INC	TOWING FOR AV	145,000	155,000	0	(228,916)	(41,552)	29,532	
G4115	101255B / 6317 919010B / 6317 919870B / 6317 101190B / 6317	COMMUNITY WORK DAY	HOT SPOT CLEANUP KEEP MAUI BEAUTIFUL	0	526,500	11,500	(394,875)	(143,125)	0	
C5185	919527 / 6112 919562 / 6112 919570 / 6112 919871B / 6112	MAUI DISPOSAL CO INC	RECYCLING PROCESSING	1,297,500	450,000		(1,541,183)	(200,000)	6,317	
C4878	919527 / 6129 919527 / 6112 919570 / 6112 919871B / 6112	MAUI WASTE SERVICES INC	COUNTY FACILITY RECYCLING	152,936	38,000		(158,647)	(16,040)	16,249	
G3877	156903 / 6317 919570 / 6317	HABITAT FOR HUMANITY	E-CYCLING	112,500	0		(112,000)	0	500	
C4896	919527 / 6112 919570 / 6112 919871B / 6112	ALOHA GLASS RECYCLING	RECYCLING DROPBOX	360,800	115,000		(404,697)	(30,000)	41,103	
C4963	919527 / 6112 919570 / 6112 919871B / 6112	MAUI DISPOSAL CO INC	MOLOKAI RECYCLING	361,100	99,999		(418,533)	(41,666)	900	

COUNTY COUNCIL REQUEST EM-3 ATTACHMENT 8B

ENVIRONMENTAL PROTECTION & SUSTAINABILITY FISCAL YEAR 16 CONTRACT STATUS

CONTRACT #	INDEX CODE/ SUBJECT CODE	VENDOR	DESCRIPTION OF PURPOSE	PRIOR YEAR ENCUMBRANCE	ENCUMBERED IN FY16	PLANNED FUTURE ENCUMBRANCE IN FY16	EXPENSES PAID	ANTICIPATED EXPENSES	POTENTIAL CARRYOVER TO FY17	NOTES
C5248	919527 / 6112 919570 / 6112 919871B / 6112	PAWNS TREE AND MULCH	MOLOKAI GREENWASTE	384,000	192,000		(512,000)	(64,000)	0	
C5304	919527 / 6112 919570 / 6112 919871B / 6112	EKO SYSTEMS	CML GREENWASTE	5,060,000	2,600,000		(6,625,572)	(970,000)	64,428	
C5783	919871B / 6112	SCHNITZER STEEL HAWAII CORP	PROCESS WHITE GOODS & AV	0	90,000	25,000	(57,348)	(45,000)	12,652	
G4111	919871B / 6317	COMMUNITY WORK DAY	PAINT AND BATTERIES	0	58,500		(43,875)	(14,625)	0	
G4113	919871B / 6317	COMMUNITY WORK DAY	USED MOTOR OIL	0	87,333		(65,500)	(21,833)	0	
								TOTAL	441,496	

COUNTY COUNCIL REQUEST EM-3 ATTACHMENT 9

EP&S DIVISION FISCAL YEAR 2017 CONTRACTUAL SERVICE

SECTION	CONTRACT #	VENDOR	DESCRIPTION OF PURPOSE	PROJECTED CONTRACT AMOUNT
AVM	OUT TO BID	OUT TO BID	EQUIP AND OPERATE MOLOKAI METALS FACILITY AND HANA AND LANAI METALS COLLECTION EVENTS	\$225,000.00
AVM	C5783	SCHNITZER STEEL DBA HAMMERHEAD	PROCESS RESIDENTIAL WHITE GOODS & ABANDONED VEHICLES	\$100,000.00
REC	C4963	RECYCLE MOLOKAI	PROVIDE RECYCLING OPERATIONS AT MOLOKAI LANDFILL	\$99,999.00
REC	C5248	PAWN TREE & TRIMMING	MOLOKAI GREENWASTE OPERATIONS	\$192,000.00
REC	C4896	ALOHA RECYCLING	RECYCLING DROPBOX HAULING AND MONITORING	\$115,000.00
REC	C4878	MAUI DISPOSAL	COM OFFICE PAPER COLLECTION AND RECYCLING	\$46,400.00
REC	C5185	MAUI DISPOSAL	PROCESSING OF RECYCLING DROPBOX AND CURBSIDE MATERIALS	\$450,000.00
REC	C5304	EKO	CML GREEN WASTE / SEWAGE SLUDGE DIVERSION AND PROCESSING	\$3,826,101.00
			TOTAL	\$5,054,500.00

FISCAL YEAR ("FY") 2017 BUDGET (EM-3 (BF-1))
Question #12

CENTRAL MAUI LANDFILL

FY2015	Cover Soil Total Tons =	136,000 tons
@ \$7.95/ton	Total Cost = \$	1,081,200
FY2016	Cover Soil Total Tons =	122,000 tons
@ \$7.95/ton (thru March)	Total Cost = \$	969,900

HANA LANDFILL

(Per ton costs varies from cinder in Hana and trucked in)

FY2015	Cover Soil Total Tons =	5,400 tons
@ \$54/ton	Total Cost = \$	291,600
FY2016	Cover Soil Total Tons =	4,800 tons
@ \$45/ton (thru March)	Total Cost = \$	216,000

MOLOKAI LANDFILL

FY2015	Cover Soil Total Tons =	15,400 tons
@ \$11.50/ton	Total Cost = \$	177,100
FY2016	Cover Soil Total Tons =	7,000 tons
@ \$11.50/ton		2,000 tons
@ \$16.50/ton (thru March)		5,000 tons
	Total Cost = \$	105,500

LANAI LANDFILL

FY2015	Cover Soil Total Tons =	1,785 tons
@ \$28/ton	Total Cost = \$	49,980
FY2016	Cover Soil Total Tons =	0 tons
@ \$28/ton (thru March)	Total Cost =	\$0