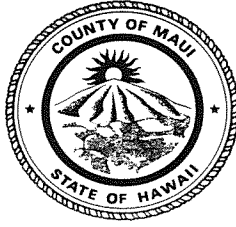


ALAN M. ARAKAWA
Mayor

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 17, 2017

Ms. Lynn A.S. Araki-Regan
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

APPROVED FOR TRANSMITTAL



Mayor

4/17/17

Date

For Transmittal to:

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

Dear Chair Hokama:

SUBJECT: FISCAL YEAR ("FY") 2018 BUDGET (EM-4) (BF-1)

The County is in receipt of the above Budget and Finance (BF) Committee requested information dated April 7, 2017. Your request and the corresponding answer is provided below by the Department of Environmental Management (DEM).

1. *With respect to the refuse disposal charge for municipal solid waste, proposed to be increased from \$81 to \$99 per ton, please provide historical cost comparisons with additional detail, not just total cost. Include staffing, equipment, and other costs in the calculation. (MW)*

See Attachment Q-1

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2. *Because increased charges for uncontaminated greenwaste, grease trap waste, biosolids, and other recyclables included in the proposed transfer from the Solid Waste Management Fund to the General Fund are not currently authorized, this change will not be reflected in the FY 2018 Budget. Please resubmit your Department's budgetary figures to account for this change. (RH)*

Please refer to Budget Office Attachment Q-2

3. *If the \$3 per truck/vehicle residential refuse hauling fee for the Central Maui Landfill proposed by your Department is approved by the Council, advise whether this fee will be sufficient to cover the cost of opening on Sundays. Provide revenue anticipated to be derived from this fee and the estimated cost of opening the Central Maui Landfill on Sundays. (YS/RH)*

As discussed in the April 6, 2017 Rates and Fees meeting, No, the \$3 does not cover the costs of opening on Sundays. The revenue from the \$3.00 Mayor proposed fee is planned to be used to further bolster the highway litter clean up.

The gross revenue estimated (based upon projected vehicle counts) from this fee is \$150,000/yr. (Note this is for the Central Maui Landfill only as a pilot project.)

The budget estimates to add an additional open day for Sundays is about \$700,000 per year. This includes the minimum eight (8) positions necessary. This cost estimate does not include the additional operations and maintenance cost, fuel, electricity and litter control. As the tons would remain the same per week, this added day decreases the efficiency of the facility, decreases the repair time available for equipment and increases the overall cost/ton and General Fund subsidy.

4. *Provide a cost estimate to conduct a feasibility study and community evaluation for once-a-week versus twice-a-week trash pick-up, for the Committee to consider in the FY 2018 Budget. Include the possibility of using color-coded cans to designate the differences in trash pick-ups, the option of providing smaller trash bins, and whether a tiered rate program could be implemented for residents who opt for once-a-week pick-up instead of twice-a-week. (EC)*

The cost estimate for such a study is wide ranging and depends upon an agreed upon detailed scope from all stake holders (County management, Council and Community). Normally project managers get cost estimates from consultants and then propose a budget. Assume several Community/Council meetings, budget analysis, cost comparisons of other 1x/week communities, union contract agreement impact reviews, etc., a rough cost estimate could be in the range of \$100,000 - \$200,000.

An all or nothing plan for any suggested changes (1day/week pick up, bin size, etc) would be recommended. If an account holder wanted to pay for two cans that could be possible, but offering an "ala carte" system may not prove to be cost effective.

5. What is the actual cost to provide residential refuse collection, per account? Provide a breakdown of the cost and the amount the service is subsidized. (RH)

REFUSE COLLECTION					
	FY18 PROJECTED COST	EST FY18 ANNUAL TONS	PROPOSED FY18 FEE	EST FY18 REVENUE	FY 18 SUBSIDY & % SUBSIDIZED
PER ACCOUNT	\$64/month (\$47/mo + \$17 landfill cost)	49,000	\$30/month/acct (\$15/mo/acct Lanai) (\$9/mo/3-Can Plan acct)	\$9,558,000	\$10,832,400
TOTAL	\$20,390,400				53%

6. What is the actual cost to provide landfill service at each landfill, per ton? Provide a breakdown of the cost and the amount the service is subsidized. (RH)

Assuming the Mayor's proposed Rate of \$99 is approved, please see the following:

DISTRICT	LANDFILL COST/TON ²	EST. TONNAGE	EST. COSTS	EST. REVENUE ¹	SUBSIDY
CENTRAL MAUI LF	\$76	219,960	\$16,716,960	\$12,695,431	\$4,021,529
HANA LF	\$1,523	1,175	\$1,789,525	\$38,271	\$1,751,254
MOLOKAI LF	\$817	7,285	\$5,951,845	\$236,559	\$5,715,286
LANAI LF	\$360	6,580	\$2,368,800	\$534,164	\$1,834,636
TOTAL		235,000	\$26,827,130	\$13,504,425	\$13,322,705

¹ Residential waste is not charged a tip fee, so there is no revenue for that tonnage included in the estimated revenue.

² Many factors adjust costs/ton estimates including: changes in tonnage, improved efficiencies, inflation/deflation, new technologies, changes in compliance requirements, debt service, CIP project costs, etc.

7. Provide the number of residential refuse accounts on Maui, Molokai, and Lanai for FY 2015 through FY 2017 to date. (RH)

NUMBER OF RESIDENTIAL REFUSE ACCOUNTS			
	FY 2015	FY 2016	FY 2017 (Through 3/31/17)
MAUI (includes Hana) (Hana)	24,936 (193)	25,271 (184)	25,289 (189)
MOLOKAI	519	514	501
LANAI	725	729	752
TOTAL	26,180	26,514	26,542

Note: These are year-end totals. Number of accounts varies throughout the year.

8. Provide the actual tonnage collected at each landfill for FY 2015 through FY 2017 to date. (RH)

TOTAL TONS LANDFILLED			
	FY 2015	FY 2016	FY 2017 (Through 3/31/17)
CENTRAL MAUI	161,358	172,318	144,324
HANA	922	958	767
MOLOKAI	4,644	5,714	4,174
LANAI	5,440	4,892	3,614

Sincerely,


Stewart Stant, Director
Department of Environmental Management

Attachments

c: Solid Waste Division

(EM4) (BF-1) ATTACHMENT Q-1
COUNTY OF MAUI LANDFILL COST SUMMARY

Report Basis: To establish a rough initial estimated starting point depicting total cost of each currently active County Landfills including the stages of developing, operating, closing and monitoring the closed landfill. Through calculating the total cost per ton of landfilled material, appropriate tipping fees may be accessed per ton for current users for use at current landfill phase (cell). This study was only performed to provide internal Department #'s for estimates and general comparisons only. Should the goal of the County move to becoming 100% self funded, then further evaluation and outsourced detailed cost accounting would become necessary.

The Cost per Ton data is presented as both Current Value (today's dollars) and Future Values (future dollars). The Future Value varies among the landfills due to projected end of cell life. The table below provides for a final recap of the costs per ton at each landfill, utilizing currently active cells or phases.

AVG. OPER COST + DEVELOPMENT + CLOSURE + POST CLOSURE COST/TON			REMAINING LIFESPAN OF LANDFILL CELL (YEARS)	PERCENTAGE OF TONNAGE	WEIGHTED AVERAGE COST PER TON USING FY17 ESTIMATES
DISTRICT	CURRENT VALUE	FUTURE VALUE			
CENTRAL MAUI LF	\$74	\$76	2.6	93.6%	\$71.20
HANA LF	\$1,438	\$1,523	10.0	0.5%	\$7.88
MOLOKAI LF	\$768	\$817	2.9	3.1%	\$25.21
LANAI LF	\$314	\$360	22.8	2.8%	\$10.12
				100.0%	\$114.40

NOTES:

Currently, of the material that is landfilled, only Commercial Accounts are charged tipping fees at the landfills.

MAUI COUNTY COST OF LANDFILLING OPERATING COST OVERVIEW

	COST TYPE	FY2013			FY2014			FY2015			FY2016			AVG. OPERATING COST/TON PAST 4 YRS (CURRENT VALUE)	AVG. OPERATING COST/TON PAST 4 YRS (FUTURE VALUE)
		TOTAL A,B,C COSTS	TOTAL TONS PROCESSED	COST PER TON	TOTAL A,B,C COSTS	TOTAL TONS PROCESSED	COST PER TON	TOTAL A,B,C COSTS	TOTAL TONS PROCESSED	COST PER TON	TOTAL A,B,C COSTS	TOTAL TONS PROCESSED	COST PER TON		
CENTRAL MAUI LF	A	\$ 1,196,274			\$ 1,162,301			\$ 1,277,123			\$ 1,388,890				
	B	\$ 3,064,906			\$ 3,554,073			\$ 3,320,691			\$ 4,278,622				
	C	\$ 36,382			\$ 93,019			\$ 27,058			\$ 20,000				
	IF	\$ 112,557			\$ 113,210			\$ 112,452			\$ 112,306				
	OH	\$ 3,478,741			\$ 3,536,679			\$ 5,704,863			\$ 5,873,312				
	TOTAL	\$ 7,888,861	149,212	\$ 53	\$ 8,459,282	158,219	\$ 53	\$ 10,442,187	163,988	\$ 64	\$ 11,673,129	173,285	\$ 67	\$ 59	\$ 60
HANA LF	A	\$ 129,624			\$ 134,760			\$ 137,789			\$ 150,859				
	B	\$ 339,554			\$ 762,668			\$ 442,476			\$ 503,750				
	C	\$ 30,312			\$ 46,562			\$ -			\$ -				
	IF	\$ 846			\$ 780			\$ 633			\$ 621				
	OH	\$ 376,944			\$ 410,051			\$ 615,499			\$ 637,950				
	TOTAL	\$ 877,280	1,122	\$ 782	\$ 1,354,821	1,090	\$ 1,243	\$ 1,196,396	922	\$ 1,297	\$ 1,293,180	958	\$ 1,350	\$ 1,168	\$ 1,183
MOLOKAI LF	A	\$ 243,645			\$ 234,469			\$ 288,822			\$ 305,953				
	B	\$ 464,776			\$ 442,432			\$ 468,404			\$ 305,298				
	C	\$ 14,577			\$ -			\$ -			\$ -				
	IF	\$ 3,182			\$ 2,496			\$ 3,185			\$ 3,701				
	OH	\$ 708,515			\$ 713,448			\$ 1,290,158			\$ 1,293,808				
	TOTAL	\$ 1,434,694	4,218	\$ 340	\$ 1,392,845	3,489	\$ 399	\$ 2,050,568	4,644	\$ 442	\$ 1,908,761	5,711	\$ 334	\$ 379	\$ 384
LANAI LF	A	\$ 159,722			\$ 168,384			\$ 148,769			\$ 170,682				
	B	\$ 257,160			\$ 262,001			\$ 235,580			\$ 158,794				
	C	\$ 33,403			\$ -			\$ -			\$ -				
	IF	\$ 3,416			\$ 3,514			\$ 3,731			\$ 3,372				
	OH	\$ 502,357			\$ 553,154			\$ 736,249			\$ 793,845				
	TOTAL	\$ 956,057	4,528	\$ 211	\$ 987,054	4,912	\$ 201	\$ 1,124,328	5,440	\$ 207	\$ 1,126,693	5,203	\$ 217	\$ 209	\$ 212
TOTAL INTERFUND BUDGET		\$ 120,000			\$ 120,000			\$ 120,000			\$ 120,000				

NOTES / ASSUMPTIONS:

"COST TYPE KEY": A= Wages B= Operations C= Equipment IF= Interfund- HWYS (by tonnage) OH=SW Admin & Overhead Allocated to Landfills (by payroll)

Total cost/ton represents cost to manage all incoming tonnages (commercial + County/State). Currently, only commercial tonnage is charged a tipping fee.

*1= One Lanai Landfill Staff performs the Residential Refuse Collection service. Two eight hours shifts per week and Fringe Benefits (part of OH) have been deducted from Lanai LF and added to Lanai Refuse Collection section.

MAUI COUNTY LANDFILL DEVELOPMENT AND POST DEVELOPMENT COSTS																			
OVERALL DATA						DEVELOPMENT COST					CLOSURE			POST CLOSURE COSTS				TOTAL COSTS	TOTAL COSTS
LOCATION	PHASE	ACRES*	AIR SPACE PROVIDED CU YDS	AIR SPACE PROVIDED TONS	REMAINING LIFE SPAN IN YRS*	PROPERTY COST/ACRE	CONSTRUCT. COST/ACRE	DEV. COST/ACRE*	INTEREST COST*	TOTAL DEVEL. COST/TON	CLOSURE COST/ACRE	CLOSURE COST/TON	TOTAL CLOSURE COST*	POST CLOSURE COST/MONTH*	POST CLOSURE PERIOD (YRS)*	TOTAL POST CLOSURE COST FOR CLOSURE PERIOD	TOTAL POST CLOSURE COST/TON	TOTAL DEL. + CLOSURE + POST CLOSURE \$/TON (CURRENT VALUE)	TOTAL DEL. + CLOSURE + POST CLOSURE \$/TON (FUTURE VALUE)
CENTRAL MAUI (CML)	V	18	2,485,000	1,605,310	2.6	\$30,000	\$484,978	\$514,978	\$751,819	\$6.24	\$162,960	\$1.83	\$2,933,280	\$27,836	30	\$10,020,930	\$6.24	\$14.31	\$15.96
HANA (HLF)	None	12	261,890	40,069	10	\$0	\$250,000	\$250,000	\$116,250	\$77.77	\$403,092	\$120.72	\$4,837,098	\$7,934	30	\$2,856,283	\$71.28	\$269.77	\$339.23
MOLOKAI (MLF)	4	2.4	60,900	17,570	2.9	\$8,000	\$1,272,395	\$1,280,395	\$704,851	\$215.02	\$284,820	\$38.91	\$683,568	\$6,578	30	\$2,368,200	\$134.79	\$388.71	\$433.47
LANAI (LLF)	None	17.5	294,670	129,949	23	\$0	\$170,000	\$170,000	\$92,846	\$23.61	\$460,977	\$62.08	\$8,067,100	\$7,128	30	\$2,566,166	\$19.75	\$105.43	\$148.48

NOTES / ASSUMPTIONS:

Land cost for HLF is \$0 due to Executive Order conveying state land
The total closure and post-closure costs for CML is based on 2017 Draft CML Closure and Post-closure Plan Report and adjusted for inflation
The total closure and post-closure costs for MLF is based on 2014 MLF Closure and Post-closure Plan Report and adjusted for inflation
The total closure and post-closure costs for LLF is based on 2011 LLF Closure and Post-closure Plan Report and adjusted for inflation
The total closure and post-closure costs for HLF is based on 2009 HLF Closure and Post-closure Plan Report and adjusted for inflation
Land cost for Lanai is \$0 due to conveyance terms by Pulama Lanai in which their tipping fees are waived & Pulama provides weekly cover soil at a prescribed amount.
3.88% Average True Interest Cost on Bonds or State Revolving Loans provided by COM Treasury*
20 Term of Bond or Loan in years average term per COM Treasury Section.*
Interest costs are equal to lifespan of cell, but no longer than 20 years
* Item tied to inflation

REFERENCE DATA FOR DEVELOPMENT AND POST DEVELOPMENT COSTS

Central Maui Landfill Airspace Data Phase V:

			Closure Cost Year	2017
	Cell Size:	18	acres	
	Property Cost:	\$30,000	per acre	
	Cell Construction Cost:	\$484,978	per acre	(\$6,272,564 to construct V-A, 12ac; Phase V-B cost \$2,457,035 to build 6 acres)
	Closure Cost:	\$162,960	per acre	2017 Closure Plan (Est. \$5,866,518 to close 36 acres - Phases IV and V)
operations cost>	Post Closure Cost:	\$27,836	per month	2017 Closure Plan
	Airspace Provided by V:	2,485,000	cubic yards	(FY16 Annual Operating Report)
	Est. Airspace Provided by V:	1,605,310	tons	
	Estimated Airspace Utilization:	0.646	tons / cubic yard (2016 Airspace Utilization - C&D included)	
	Year In Service:	2010		(Opened December 29, 2009)
	Current Year:	2017		
	Lifespan of Phase V:	9.6	years	168000 (Average of FY15 and FY16 incoming tonnages)
	Remaining Lifespan of Phase V:	2.6	years	

Molokai Landfill Airspace Data Phase 3:

			Closure Cost Year	2014
	Cell Size:	2.4	acres	
	Property Cost:	\$8,000	per acre	
	Cell Construction Cost:	\$1,272,395	per acre	(\$3,053,748 to construct Phase 4 - 2.4 acres)
	Closure Cost:	\$284,820	per acre	2014 Closure Plan (Est. \$5,354,697 to close 18.8 acres - Phases 1-4)
	Post Closure Cost:	\$6,578	per month	2014 Closure Plan
	Airspace Provided by Phase 4:	60,900	cubic yards	(FY16 Annual Operating Report)
	Est. Airspace Provided by Phase 4:	17,570	tons	
	Estimated Airspace Utilization:	0.289	tons / cubic yard	(2016 Airspace Utilization)
	Year In Service:	2016.5		(Began landfilling July 2016)
	Current Year:	2017		
	Lifespan of Phase 4:	3.4	years	5200 (Average of FY15 and FY16 incoming tonnages)
	Remaining Lifespan of Phase 4:	2.9	years	

Hana Landfill Airspace Data:

Cell Size:	12	acres	Closure Cost Year	2009
Property Cost:	\$0	per acre	2009 HLF DRAFT Master Plan	
Cell Construction Cost:	\$250,000	per acre	Unlined landfill	
Closure Cost:	\$403,092	per acre	2009 HLF DRAFT Closure/Post Closure Plan (\$4,837,098 to close 12 acres)	
Post Closure Cost:	\$7,934	per month	2009 HLF DRAFT Closure/Post Closure Plan (\$2,856,283 post-closure over 30 years)	
Airspace:	261,890	cubic yards	(FY16 Annual Operating Report)	
Est. Airspace:	40,069	tons		
Estimated Airspace Utilization:	0.153	tons / cubic yard	(FY16 Annual Operating Report)	
Year In Service:	1969		2009 HLF DRAFT Master Plan	
Year Airspace Calc Completed:	2016		2016 Airspace Calc from A-Mehr, Inc. using Terra Model	
Current Year:	2017			
Lifespan of HLF:	42.0	years	940 Estimated 940 tons landfilled in FY16, Annual Operating Report	
Remaining Lifespan of HLF:	10.0	years		

Lanai Landfill Airspace Data:

Cell Size:	17.5	acres	Closure Cost Year	2011
Property Cost:	\$0	per acre	2011 LLF Master Plan (17.44 acres active landfill)	
Cell Construction Cost:	\$170,000	per acre		
Closure Cost:	\$460,977	per acre	2011 LLF Closure/Post Closure Plan (\$8,067,100 to close 17.5 acres)	
Post Closure Cost:	\$7,128	per month	2011 LLF Closure/Post Closure Plan (\$2,566,166 post-closure over 30 years)	
Airspace:	294,670	cubic yards	(FY16 Annual Operating Report)	
Est. Airspace:	129,949	tons		
Estimated Airspace Utilization:	0.441	tons / cubic yard	Assume same airspace utilization as Molokai LF.	
Year In Service:	1969		2011 LLF Master Plan	
Year Airspace Calc Completed:	2015		(FY16 Annual Operating Report)	
Current Year:	2017			
Lifespan of LLF (Since July 2008):	24.8	years	5233 Estimated 5233 tons landfilled in FY16, Annual Operating Report	
Remaining Lifespan of LLF:	22.8	years	(1st three quarters of FY13, measured 3,525 tons; Average over 4 Qtrs, est. 4,700 tons)	

Solid Waste Admin Expense Allocation

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	FY2013	FY2014	FY2015	FY2016
SW Admin A-B-C	888,874	939,364	969,104	1,013,169
SS/MCARE	274,700	186,785	350,026	369,659
ERS	674,732	764,195	837,027	897,480
EUTF (MED, VISION, DENTAL, LIFE)	754,944	756,198	888,408	915,813
Debt Service				
SW Admin Overhead	1,785,769	1,788,256	4,143,086	4,318,833
OPEB	487,482	488,472	873,821	756,743
DEM ADMIN CONTRIBUTION	215,951	305,832	301,275	344,026
Total SW Admin Exps	5,082,452	5,229,102	8,362,747	8,615,723
Total Ops	1,747,760	1,718,502	1,872,132	2,037,401
CML Payroll	1,196,274	1,162,301	1,277,123	1,388,890
% Factor for CML	68.45%	67.63%	68.22%	68.17%
CML Share	3,478,741	3,536,679	5,704,863	5,873,312
HLF Payroll	129,624	134,760	137,789	150,859
% Factor for HLF	7.42%	7.84%	7.36%	7.40%
HLF Share	376,944	410,051	615,499	637,950
MLF Payroll	243,645	234,469	288,822	305,953
% Factor for MLF	13.94%	13.64%	15.43%	15.02%
MLF Share	708,515	713,448	1,290,158	1,293,808
LLF Payroll	178,217	186,972	168,398	191,699
% Factor for LLF	10.20%	10.88%	8.99%	9.41%
LLF Share	518,252	568,923	752,228	810,653

\$ Proof	5,082,452	5,229,102	8,362,747	8,615,723
% Proof	100.00%	100.00%	100.00%	100.00%

ASSUMPTIONS:

Allocation factor is a percentage of each landfill's payroll to total payroll for operations
Debt service has been omitted due to principle accounted for in development costs &
other costs are included in sum of debt service
Interest cost on principle will be considered in development costs.

MAUI COUNTY LANDFILL DEVELOPMENT, OPERATIONS AND POST DEVELOPMENT COSTS WITH INFLATION

Inflation Factor: 1.30% Calc Year 2017

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	COST BASIS	DATE BASIS	YEARS TO INFLATE FROM DATE BASIS TO 2017	PAYMENT STREAM	YEARS UNTIL CLOSURE	YEARS REQUIRED TO MONITOR AFTER CLOSURE	n	pmt	PV	FV	LANDFILL COSTS	COST PER TON
CML- PHASE: V												
DEVELOPMENT	\$ 10,021,418										\$ 10,021,418	\$ 6.24
OPERATIONS (Cost/Ton) *	\$ 59	2016	1	PER YEAR	2.6		1.0	\$ 60	\$ -	\$60.12		\$ 60.12
CLOSURE	\$ 2,933,280	2017	0	ONE TIME	2.6		2.6	\$ -	\$ 2,933,280	\$3,031,712.34	\$ 3,031,712	\$ 1.89
POST CLOSURE PAYMENT CALCULATION	\$ 334,031	2017	0	PER YEAR	2.6		2.6	\$ -	\$ 334,031	\$ 345,240	FACTOR FOR <PAYMENT ONLY	
POST CLOSURE	\$ 345,240			PER YEAR		30	30.0	\$ 345,240	\$ -	\$ 12,568,690	\$ 12,568,690	\$ 7.83
TOTAL COST											\$ 25,621,820	\$ 76.08
HLF- PHASE: NONE												
DEVELOPMENT	\$ 3,116,250										\$ 3,116,250	\$ 77.77
OPERATIONS (Cost/Ton) *	\$ 1,168	2016	1	PER YEAR	10.0		1.0	\$ 1,183	\$ -	\$1,183.28		\$ 1,183.28
CLOSURE	\$ 4,837,098	2009	8	ONE TIME	10.0		18.0	\$ -	\$ 4,837,098	\$ 6,103,162	\$ 6,103,162	\$ 152.32
POST CLOSURE PAYMENT CALCULATION	\$ 95,209	2009	8	PER YEAR	10.0		18.0	\$ -	\$ 95,209	\$ 120,130	FACTOR FOR <PAYMENT ONLY	
POST CLOSURE	\$ 120,130			PER YEAR		30	30.0	\$ 120,130	\$ -	\$ 4,373,396	\$ 4,373,396	\$ 109.15
TOTAL COST											\$ 13,592,808	\$ 1,522.52
MLF- PHASE: 4												
DEVELOPMENT	\$ 3,777,799										\$ 3,777,799	\$ 215.02
OPERATIONS (Cost/Ton) *	\$ 379	2016	1	PER YEAR	2.9		1.0	\$ 384	\$ -	\$383.71		\$ 383.71
CLOSURE	\$ 683,568	2014	3	ONE TIME	2.9		5.9	\$ -	\$ 683,568	\$ 737,494	\$ 737,494	\$ 41.98
POST CLOSURE PAYMENT CALCULATION	\$ 78,940	2014	3	PER YEAR	2.9		5.9	\$ -	\$ 78,940	\$ 85,167	FACTOR FOR <PAYMENT ONLY	
POST CLOSURE	\$ 85,167			PER YEAR		30	30.0	\$ 85,167	\$ -	\$ 3,100,578	\$ 3,100,578	\$ 176.47
TOTAL COST											\$ 7,615,870	\$ 817.18
LLF- PHASE: NONE												
DEVELOPMENT	\$ 3,067,846										\$ 3,067,846	\$ 23.61
OPERATIONS (Cost/Ton) *	\$ 209	2016	1	PER YEAR	22.8		1.0	\$ 212	\$ -	\$211.54		\$ 211.54
CLOSURE	\$ 8,067,100	2011	6	ONE TIME	22.8		28.8	\$ -	\$ 8,067,100	\$ 11,707,195	\$ 11,707,195	\$ 90.09
POST CLOSURE PAYMENT CALCULATION	\$ 85,539	2011	6	PER YEAR	22.8		28.8	\$ -	\$ 85,539	\$ 124,136	FACTOR FOR <PAYMENT ONLY	
POST CLOSURE	\$ 124,136			PER YEAR		30	30.0	\$ 124,136	\$ -	\$ 4,519,264	\$ 4,519,264	\$ 34.78
TOTAL COST											\$ 19,294,305	\$ 360.02

NOTES/ASSUMPTIONS:

* Operations cost is a four years average from 2013 to 2016 (No inflation applied to calculating this average)
No FV calculation performed on Development Costs but does include interest

EM-4 BF-1 ATTACHMENT Q-2

COUNTY OF MAUI FY 2018 MAYOR'S PROPOSED BUDGET DETAIL BUDGET SUMMARY BY DEPARTMENT AND FUND TYPE

Department: ENVIRONMENTAL MANAGEMENT				Fund: SOLID WASTE MANAGEMENT FUND		
Program/ Character	FY 2016 Actual	FY 2017 Proposed	FY 2017 As Amended*	FY 2018 Proposed	Change Amount	Change Percent
<i>Solid Waste Administration Program</i>						
Salaries and Wages	\$755,192	\$1,004,892	\$1,004,892	\$1,001,397	-\$3,495	-0.3%
Operations**	\$12,374,807	\$14,253,239	\$14,174,574	\$12,692,327	-\$1,482,247	-10.5%
Equipment	-\$3,710	\$9,300	\$9,300	\$54,300	\$45,000	483.9%
Program Total	\$13,126,289	\$15,267,431	\$15,188,766	\$13,748,024	-\$1,440,742	-9.5%
Program Total - E/P	14.0	14.0	14.0	14.0	0.0	N/A
<i>Solid Waste Operations Program</i>						
Salaries and Wages	\$4,389,603	\$4,855,585	\$4,790,754	\$4,759,595	-\$31,159	-0.7%
Operations	\$6,694,043	\$8,088,012	\$7,628,761	\$7,719,587	\$90,826	1.2%
Equipment	\$19,306	\$140,000	\$140,000	\$0	-\$140,000	-100.0%
Program Total	\$11,102,952	\$13,083,597	\$12,559,515	\$12,479,182	-\$80,333	-0.6%
Program Total - E/P	82.0	82.0	82.0	82.0	0.0	N/A
<i>Metals and Abandoned Vehicles Program</i>						
Salaries and Wages	\$0	\$0	\$0	\$0	\$0	N/A
Operations	-\$2,263	\$0	\$0	\$0	\$0	N/A
Equipment	\$0	\$0	\$0	\$0	\$0	N/A
Program Total	-\$2,263	\$0	\$0	\$0	\$0	N/A
Program Total - E/P	0.0	0.0	0.0	0.0	0.0	N/A

COUNTY OF MAUI
FY 2018 MAYOR'S PROPOSED BUDGET
DETAIL BUDGET SUMMARY BY DEPARTMENT AND FUND TYPE

Department: ENVIRONMENTAL MANAGEMENT				Fund: SOLID WASTE MANAGEMENT FUND		
Program/ Character	FY 2016 Actual	FY 2017 Proposed	FY 2017 As Amended*	FY 2018 Proposed	Change Amount	Change Percent
Environmental Protection and Sustainability Program						
Salaries and Wages	\$159,318	\$262,615	\$154,820	\$211,148	\$56,328	36.4%
Operations	\$4,067,230	\$5,050,550	\$4,903,135	\$6,092,465	\$1,189,330	24.3%
Equipment	\$0	\$0	\$0	\$0	\$0	N/A
Program Total	\$4,226,548	\$5,313,165	\$5,057,955	\$6,303,613	\$1,245,658	24.6%
Program Total - E/P	3.0	3.0	3.0	3.0	0.0	N/A
FUND TOTAL						
Salaries and Wages	\$5,144,795	\$6,123,092	\$5,950,466	\$5,972,140	\$21,674	0.4%
Operations	\$19,066,587	\$27,391,801	\$26,706,470	\$26,504,379	-\$202,091	-0.8%
Equipment	\$15,596	\$149,300	\$149,300	\$54,300	-\$95,000	-63.6%
FUND TOTAL - E/P	99.0	99.0	99.0	99.0	0.0	N/A

Notes: True sum may be different due to rounding.

* Includes FY 2017 approved budget amendments through February 28, 2017.

**Includes contributions to the General Fund for ERS, FICA, Health Fund, Administrative Overhead Charge, Interfund Transfers, Contributions to the General Fund for Other Post-Employment Benefits and Debt Service, and Reimbursement for the DEM Administration Program.

COUNTY OF MAUI
FY 2018 MAYOR'S PROPOSED BUDGET
EXPLANATION OF CHANGES TO REGULAR WAGES AND POSITION DETAIL

Department Environmental Management

Program ENVIRONMENTAL PROTECTION AND SUSTAINABILITY PROGRAM

Fund Special Revenue Fund

Sub-Fund Solid Waste Management Fund

FY 2017 COUNCIL ADOPTED						FY 2018 MAYOR'S PROPOSED								EXPLANATION OF CHANGES
Position No.	Position Title	SR/Step	BU	FY 2017 Amount	FY 2017 E/P	Position No.	Position Title	SR/Step	BU	(+/-) OVER FY 2017 Adopted Amount	FY 2018 Amount	(+/-) OVER FY 2017 Adopted E/P	FY 2018 E/P	
919871A EP & S SOLIDWASTE ALTERNATIVES SALARIES						919871A EP & S SOLIDWASTE ALTERNATIVES SALARIES								
DE-0057	Recycling Specialist IV	SR-22J	13	\$0	1.0	DE-0057	Recycling Specialist II	SR-18H	13	\$52,824	\$52,824	0.0	1.0	Redescribe position and add funding for salary, E/P only was approved in FY 2017.
DE-0173	Recycling Specialist IV	SR-22H	13	\$61,824	1.0	DE-0173	Recycling Specialist IV	SR-22H	13	\$0	\$61,824	0.0	1.0	
DE-0175	Recycling Coordinator	SR-26L	13	\$87,996	1.0	DE-0175	Recycling Specialist IV	SR-23M	13	\$3,504	\$91,500	0.0	1.0	Voluntary demotion of incumbent.
Total 919871A EP & S SOLIDWASTE ALTERNATIVES SALARIES				\$149,820	3.0	Total 919871A EP & S SOLIDWASTE ALTERNATIVES SALARIES				\$56,328	\$206,148	0.0	3.0	
TOTAL ENVIRONMENTAL PROTECTION AND SUSTAINABILITY PROGRAM				\$149,820	3.0	TOTAL ENVIRONMENTAL PROTECTION AND SUSTAINABILITY PROGRAM				\$56,328	\$206,148	0.0	3.0	

COUNTY OF MAUI
FY 2018 MAYOR'S PROPOSED BUDGET
EXPLANATION OF CHANGES TO OTHER PREMIUM PAY

Department Environmental Management
Program ENVIRONMENTAL PROTECTION AND SUSTAINABILITY PROGRAM

Fund Special Revenue Fund
Sub-Fund Solid Waste Management Fund

					(+/-) OVER FY 2017 Adopted			
Index Code	Sub-Object Code/Description	FY 2016 Actual	FY 2017 Proposed	FY 2017 As Amended	Continuation Request	Expansion Request	FY 2018 Proposed	EXPLANATION OF CHANGES
919871A EP & S SOLIDWASTE ALTERNATIVES								
919871A	5215 Premium Pay		\$5,000	\$5,000			\$5,000	
Total	919871A EP & S SOLIDWASTE ALTERNATIVES	\$0	\$5,000	\$5,000	\$0	\$0	\$5,000	
TOTAL	ENVIRONMENTAL PROTECTION AND SUSTAINABILITY PROGRAM	\$0	\$5,000	\$5,000	\$0	\$0	\$5,000	

NOTE: OTHER PREMIUM PAY INCLUDES EMERGENCY CALL BACK, HAZARDOUS PAY, NIGHT DIFFERENTIAL, OVERTIME, STANDBY, TEMPORARY ASSIGNMENT, OTHERS, PREMIUM PAY, AND SALARY ADJUSTMENTS

COUNTY OF MAUI
FY 2018 MAYOR'S PROPOSED BUDGET
EXPLANATION OF CHANGES TO OPERATIONS

Department Environmental Management
Program ENVIRONMENTAL PROTECTION AND SUSTAINABILITY PROGRAM

Fund Special Revenue Fund
Sub-Fund Solid Waste Management Fund

					(+/-) OVER FY 2017 Adopted			
Index Code	Sub-Object Code/Description	FY 2016 Actual	FY 2017 Proposed	FY 2017 As Amended	Continuation Request	Expansion Request	FY 2018 Proposed	EXPLANATION OF CHANGES
919871B EP&S SOLID WASTE ALTERNATIVES OPERATION								
919871B	6005 Auto Parts	\$436					\$0	
919871B	6023 Gas/diesel/oil interfund	\$189	\$1,566	\$1,566			\$1,566	
919871B	6031 Repairs & Maintenance Supplies	\$200					\$0	
919871B	6035 Miscellaneous Supplies	\$15,767	\$16,700	\$16,700		\$150,000	\$166,700	Additional funding to replace recycling bins at residential recycling center.
919871B	6037 Office Supplies	\$41	\$300	\$300			\$300	
919871B	6040 Postage	\$2,282	\$20,000	\$20,000			\$20,000	
919871B	6060 Small Equipment - under \$1000	\$361					\$0	
919871B	6101 Advertisement		\$1,000	\$1,000			\$1,000	
919871B	6112 Contractual Service	\$3,614,033	\$4,431,500	\$4,284,085		\$1,039,840	\$5,323,925	Additional \$167,806 needed due to anticipated increase in greenwaste; fats, oils and grease; biosolids and landfill diversion contracts as well as a decrease in commodity values which may lead to more abandoned vehicles being dumped. Additional \$298,000 needed due to increased Used Motor Oil contract costs and \$111,640 increase for anticipated increase from \$0 to \$200 per vehicle for abandoned vehicle disposal and increase for residential abandoned vehicle subsidy program. Additional \$462,394 needed for metals and related materials landfill diversion projects on Maui, remote areas, Molokai, Lanai including Maui residential white goods, Hana and Lanai collection events, Molokai metals diversion, CML metals diversion; and sharp increases in metals processing prices and expansion of programs.

COUNTY OF MAUI
FY 2018 MAYOR'S PROPOSED BUDGET
EXPLANATION OF CHANGES TO OPERATIONS

Department Environmental Management

Program ENVIRONMENTAL PROTECTION AND SUSTAINABILITY PROGRAM

Fund Special Revenue Fund

Sub-Fund Solid Waste Management Fund

Index Code	Sub-Object Code/Description	FY 2016 Actual	FY 2017 Proposed	FY 2017 As Amended	(+/-) OVER FY 2017 Adopted		FY 2018 Proposed	EXPLANATION OF CHANGES
					Continuation Request	Expansion Request		
919871B	6120 Electricity	\$2,667			\$1,500		\$1,500	Adjustment based on inflationary factors. EP&S moved to a new office and now pays its own electric bills.
919871B	6122 Freight and Hauling	\$856	\$14,000	\$14,000			\$14,000	
919871B	6128 Operating power -warning siren	\$421					\$0	
919871B	6129 Other Services	\$20,917	\$118,476	\$118,476			\$118,476	
919871B	6130 Printing & Binding	\$3,800	\$20,000	\$20,000			\$20,000	
919871B	6132 Professional Services	\$3,677	\$10,000	\$10,000			\$10,000	
919871B	6138 R & M - Services/Contracts	\$3,271					\$0	
919871B	6152 Cellular telephone	\$1,688	\$1,000	\$1,000			\$1,000	
919871B	6178 Water delivery charges	\$1,490	\$2,620	\$2,620	-\$1,010		\$1,610	Adjustment based on inflationary factors.
919871B	6201 Airfare, Transportation	\$493	\$3,500	\$3,500			\$3,500	
919871B	6204 Mileage & Allow Rptble Non-Tax		\$478	\$478			\$478	
919871B	6222 Per Diem Non-Reportable		\$300	\$300			\$300	
919871B	6226 Per Diem S/D/T Taxable	\$60	\$200	\$200			\$200	
919871B	6212 Dues		\$500	\$500			\$500	
919871B	6218 Meal Allowance	\$470	\$200	\$200			\$200	
919871B	6221 Miscellaneous Other Costs		\$2,000	\$2,000	-\$1,000		\$1,000	Reduced by department.
919871B	6225 Publications & Subscriptions	\$112	\$250	\$250			\$250	
919871B	6230 Registration/Training Fees		\$3,000	\$3,000			\$3,000	
919871B	6235 Rentals	\$36,212	\$38,460	\$38,460			\$38,460	
919871B	6240 Retirement & Service Awards	-\$47					\$0	
919871B	6317 County grant subsidy	\$242,833	\$239,500	\$239,500			\$239,500	
	919871B EP&S SOLID WASTE ALTERNATIVES							
Total	OPERATION	\$3,952,230	\$4,925,550	\$4,778,135	-\$510	\$1,189,840	\$5,967,465	
919600B HHW MANAGEMENT PROGRAM OPERATION								
919600B	6112 Contractual Service	\$100,000	\$100,000	\$100,000			\$100,000	
Total	919600B HHW MANAGEMENT PROGRAM OPERATION	\$100,000	\$100,000	\$100,000	\$0	\$0	\$100,000	
919870B COMMUNITY WORK DAY OPERATION								
919870B	6317 County grant subsidy	\$15,000	\$25,000	\$25,000			\$25,000	

COUNTY OF MAUI
FY 2018 MAYOR'S PROPOSED BUDGET
EXPLANATION OF CHANGES TO OPERATIONS

Department Environmental Management

Fund Special Revenue Fund

Program ENVIRONMENTAL PROTECTION AND SUSTAINABILITY PROGRAM

Sub-Fund Solid Waste Management Fund

Index Code	Sub-Object Code/Description	FY 2016 Actual	FY 2017 Proposed	FY 2017 As Amended	(+/-) OVER FY 2017 Adopted		FY 2018 Proposed	EXPLANATION OF CHANGES
					Continuation Request	Expansion Request		
Total	919870B COMMUNITY WORK DAY OPERATION	\$15,000	\$25,000	\$25,000	\$0	\$0	\$25,000	
TOTAL	ENVIRONMENTAL PROTECTION AND SUSTAINABILITY PROGRAM	\$4,067,230	\$5,050,550	\$4,903,135	-\$510	\$1,189,840	\$6,092,465	