

ALAN M. ARAKAWA  
Mayor

DAVID C. GOODE  
Director

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COUNTY OF MAUI  
**DEPARTMENT OF PUBLIC WORKS**

200 SOUTH HIGH STREET, ROOM NO. 434  
WAILUKU, MAUI, HAWAII 96793

March 15, 2016

GLEN A. UENO, P.E., P.L.S.  
Development Services Administration

RECEIVED

2016 MAR 15 PM 4:19

CARY YAMASHITA, P.E.  
Engineering Division

OFFICE OF THE MAYOR


Highways Division

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

For Transmittal to:

Honorable Elle Cochran, Chair  
Infrastructure and Environmental  
Management Committee  
Maui County Council  
200 South High Street  
Wailuku, Maui, Hawaii 96793

**APPROVED FOR TRANSMITTAL**

 3/16/16  
**Mayor** **Date**

OFFICE OF THE  
COUNTY COUNCIL

2016 MAR 16 PM 4:19

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Dear Chair Cochran:

**SUBJECT: INTEGRATED PEST AND ENVIRONMENTAL  
MANAGEMENT ON COUNTY PROPERTY (IEM-52)**

The Department of Public Works is in receipt of your letter dated March 7, 2016 regarding the above-referenced subject. The Department offers the following responses to your request for information.

- 1. Pesticides used by your Department during Fiscal Years 2014, 2015, and 2016, listing brand name and quantity used by month.**

The Highways Division (Division) uses three brands of herbicides: Roundup, AquaMaster, and Kleen Up Pro. Exhibit "1" identifies the brand name and the quantities used in Calendar Years 2013, 2014, and 2015 (through October 2015).

Exhibit "2" identifies the brand name quantities used during the months of November 2015, December 2015, January 2016, and February 2016.

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The Division also utilizes Garlon 4, a specialty herbicide used on woody species. The Division is currently tabulating data on their use of Garlon 4, and a copy of the data will be provided to you and your Committee as soon as it is made available.

**2. Budgeted amount and actual expenditures for such pesticide usage, by Fiscal Year starting with 2014 through the current Fiscal Year.**

Exhibit "1" shows the amount of gallons purchased for each product, each unit cost, and the total amount spent during each calendar year. Exhibit "2" shows a breakdown of the amount of herbicide purchased and used by each district from November 2015 to February 2016.

**3. Current weed control schedule being used by your Department, specifying brand name and pesticide quantity used.**

Weed and vegetation control is conducted at least once a month along the roadways, hardscapes, guardrails, and shoulder areas maintained by each district. It is done through a combination of mowing, weed whacking, and the application of herbicides. Exhibit "1" identifies the herbicide quantity used during each calendar month.

Herbicide application is typically done along guardrails and hardscapes that include pavements and sidewalks, where mowing and weed whacking are not always feasible due to the size of the mower or limits in maneuvering around the area. If left untreated, vegetative growth results in additional damage to these surfaces or creates sight obstructions. Herbicide applications are also used in pavement preservation work, in preparation for crack sealing operations, prior to seal coating a road.

**4. A description of any unique challenges that your Department faces in controlling weeds on Maui roadways.**

Weeds and tall grasses along road shoulders, guardrails, and within the travel pavement can limit driver visibility, cause obstructions to pedestrians, bicycles, and vehicles, and can also lead to the deterioration of roads and sidewalks.

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The Division's primary methods for managing vegetative growth are mowing and hand trimming (weed whacking), but these methods are not often feasible because of mower size and limits in maneuvering around smaller areas or areas under guardrails. These methods can also be time consuming and much more labor intensive if frequent attention to these areas is needed. Staff also considers the amount of exposure working next to areas of high vehicular traffic and other safety issues.

Pursuant to Chapter 12.20 of the Maui County Code (MCC), the owners of real property that abut or adjoin a County street are required to maintain sidewalks and shoulder areas from weeds and noxious growth. MCC, however, excludes real property owners within agricultural districts whose lots exceed 15 acres. As such, the Division becomes responsible for weed and vegetation control along the frontage of these properties.

During "wet" years, our road shoulders and sidewalks need to be addressed more frequently throughout the year to adequately control unwanted vegetation. The recent rain events that we've experienced in the last year have contributed to the increased weed and vegetative growth along our road shoulders, leading to calls for action and assistance from many residents and property owners on properties of 15 acres or less in our agricultural and rural communities. The Department's response is typically to inform the property owner that it is their responsibility to maintain their frontage according to MCC, Chapter 12.20. In recent months, however, our staff has made decisions to proceed forward in maintaining these areas to address immediate safety concerns regarding limited driver visibility and obstructions to the travel way.

The Department of Public Works is very interested in working with your Committee and with other agencies in identifying solutions to manage noxious weed and vegetative growth in our County. We look forward to a discussion that we hope will generate solutions resulting in improved aesthetics, cost-effective measures, and have low impacts to the environment.

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If you have any questions regarding this letter, please contact me at Ext. 7845.

Sincerely,



DAVID C. GOODE  
Director of Public Works

DCG:RMDA:jso

Attachments

xc: Office of the Mayor  
Department of the Corporation Counsel  
Highways Division  
Kaala Buenconsejo, Director of Parks and Recreation  
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COUNTY OF MAUI, DEPARTMENT OF PUBLIC WORKS, HIGHWAYS DIVISION  
REQUEST FOR INFORMATION: HERBICIDE USE

GALLONS: Month/Year	RoundUp		AquaMaster		Kleen Up Pro		03/15/2016
	purchase	used	purchase	used	purchase	used	
01/2013	4.0	0.0	0.0	2.5	0.0	5.0	
02/2013	33.4	3.4	50.0	0.0	0.0	0.0	
03/2013	2.5	5.0	0.0	2.5	0.0	0.0	
04/2013	0.0	1.6	0.0	0.0	0.0	0.0	
05/2013	5.5	3.3	0.0	5.0	0.0	0.0	
06/2013	0.0	1.6	0.0	10.0	0.0	0.0	
07/2013	52.5	2.5	0.0	2.5	0.0	5.0	
08/2013	0.0	2.5	0.0	2.5	0.0	0.0	
09/2013	0.0	8.0	0.0	0.0	0.0	0.0	
10/2013	0.0	24.3	50.0	5.0	0.0	0.0	
11/2013	43.4	1.6	0.0	0.0	0.0	0.0	
12/2013	0.0	1.6	0.0	2.5	0.0	0.0	
CY2013 TOTAL	141.3	55.4	100.0	32.5	0.0	10.0	
UNIT PRICE	\$ 38.25		\$ 45.00		\$ 31.00		
CY2013 COST	\$ 5,404.73		\$ 4,500.00		\$ -		
01/2014	0.0	1.6	0.0	0.0	0.0	5.0	
02/2014	0.0	8.4	0.0	0.0	0.0	0.0	
03/2014	0.0	0.0	0.0	7.5	0.0	0.0	
04/2014	0.0	1.9	0.0	0.0	0.0	0.0	
05/2014	1.0	1.6	0.0	0.0	0.0	0.0	
06/2014	0.0	3.3	0.0	10.0	0.0	0.0	
07/2014	1.0	6.0	0.0	5.0	0.0	5.0	
08/2014	7.0	7.6	0.0	7.5	0.0	0.0	
09/2014	1.0	17.2	0.0	15.0	0.0	0.0	
10/2014	0.0	2.5	0.0	2.5	0.0	0.0	
11/2014	0.0	0.0	0.0	0.0	0.0	0.0	
12/2014	0.0	3.3	0.0	0.0	0.0	0.0	
CY2014 TOTAL	10.0	53.4	0.0	47.5	0.0	10.0	
UNIT PRICE	\$ 38.25		\$ 45.00		\$ 31.00		
CY2014 COST	\$ 382.50		\$ -		\$ -		
01/2015	2.0	0.0	0.0	3.0	0.0	5.0	
02/2015	2.0	0.0	0.0	0.0	0.0	0.0	
03/2015	0.0	6.7	0.0	0.0	0.0	0.0	
04/2015	0.0	2.5	20.0	3.5	0.0	0.0	
05/2015	0.0	0.0	0.0	4.5	0.0	0.0	
06/2015	30.0	1.7	5.0	5.0	0.0	0.0	
07/2015	0.0	0.3	0.0	9.5	0.0	5.0	
08/2015	10.0	0.3	5.0	7.0	0.0	0.0	
09/2015	2.0	1.7	0.0	3.5	0.0	0.0	
10/2015	0.0	0.0	0.0	1.0	0.0	0.0	
11/2015	33.4	2.6					
12/2015	0.0	0.7					
CY2015 TOTAL	79.4	16.5	30.0	37.0	0.0	10.0	
UNIT PRICE	\$ 38.25		\$ 45.00		\$ 31.00		
CY2015 COST	\$ 3,037.05		\$ 1,350.00		\$ -		
TOTAL GALLONS	230.7		130.0		0.0		
UNIT PRICE	\$ 38.25		\$ 45.00		\$ 31.00		
3 YEAR COST	\$ 8,824.28		\$ 5,850.00		\$ -		
PREVIOUS STOCK	17.4		39.5		30.0		
CY2013 PURCHASE	141.3		100.0		0.0		
CY2013 USED		55.4		32.5		10.0	
CY2014 PURCHASE	10.0		0.0		0.0		
CY2014 USED		53.4		47.5		10.0	
CY2015 PURCHASE	79.4		30.0		0.0		
CY2015 USED		16.5		37.0		10.0	
TOTAL:	230.7	125.3	130.0	117.0	0.0	30.0	
CURRENT BALANCE	122.8		52.5		0		

# DPW HIGHWAYS HERBICIDE PURCHASE/USE

STOCK @ 10/30/2015									
RoundUp			AquaMaster			KleenUp Pro			
GALLONS:									
Hana			1.99			0			
Lahaina			46.76			45			
Lanai			25			0			
Makawao			15			5			
Molokai			4			0			
Wailuku			0			2.5			
TOTAL:			92.75			52.5			0
NOVEMBER 2015									
RoundUp			AquaMaster			KleenUp Pro			
GALLONS:	purchase	use	STOCK	purchase	use	STOCK	purchase	use	STOCK
Hana	0	0.55	1.44	0	0	0			0
Lahaina	0	0	46.76	0	0	45			0
Lanai	0	0	25	0	0	0			0
Makawao	16.7	2	29.7	0	0	5			0
Molokai	0	0	4	0	0	0			0
Wailuku	16.7	0	16.7	0		2.5			0
TOTAL:	33.4	2.55	123.6	0	0	52.5	0	0	0
DECEMBER 2015									
Hana	0	0.7	0.74	0	0	0			0
Lahaina	0	0	46.76	0	0	45			0
Lanai	0	0	25	0	0	0			0
Makawao	0	0	29.7	0	0	5			0
Molokai	0	0	4	0	0	0			0
Wailuku	0	0	16.7	0		2.5			0
TOTAL:	0	0.7	122.9	0	0	52.5	0	0	0
JANUARY 2016									
Hana	0	0	0.74	0	0	0			0
Lahaina	0	0	46.76	0	0	45			0
Lanai	0	0	25	0	0	0			0
Makawao	0	0.1	29.6	0	0	5			0
Molokai	0	0	4	0	0	0			0
Wailuku	0	0.75	15.95	0		2.5			0
TOTAL:	0	0.85	122.05	0	0	52.5	0	0	0
FEBRUARY 2016									
Hana	0	0	0.74	0	0	0			0
Lahaina	0	0	46.76	0	0	45			0
Lanai	0	0	25	0	0	0			0
Makawao	0	0	29.6	0	0	5			0
Molokai	0	0	4	0	0	0			0
Wailuku	0	0.75	15.2	0		2.5			0
TOTAL:	0	0.75	121.3	0	0	52.5	0	0	0
03/15/2016									
NOTES:									
a) 1 oz = 0.0078125 gallons									
b) populate purchase/use & spreadsheet will calculate									