ALAN M. ARAKAWA Mayor

DAVID C. GOODE Director

ROWENA M. DAGDAG-ANDAYA
Deputy Director

Telephone: (808) 270-7845 Fax: (808) 270-7955



GLEN A. UENO, P.E., P.L.S.

RECEIVED evelopment Services Administration

CARY YAMASHITA, P.E. 7016 MAR 15 PM 4: 19 Engineering Division

## COUNTY OF MAUI OFFICE OF THE MAYOR Highways Division DEPARTMENT OF PUBLIC WORKS

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

March 15, 2016

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

Mayor

Date

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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.

Honorable Alan M. Arakawa For Transmittal to: Honorable Elle Cochran, Chair March 15, 2016 Page 2

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, guardarils, 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. Honorable Alan M. Arakawa For Transmittal to: Honorable Elle Cochran, Chair March 15, 2016 Page 3

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.

Honorable Alan M. Arakawa For Transmittal to: Honorable Elle Cochran, Chair March 15, 2016 Page 4

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:	Roun	dUp	AquaN	laster	Kleen I	Up Pro	03/15/2016
Month/Year	purchase	used	purchase	used	purchase		
01/2013	4.0	0.0	0.0	2.5	0.0	5.0	
02/2013	33.4	3.4	······································				***************************************
03/2013	2.5	5.0			0.0	·	
04/2013	0.0	1.6	· ·····				
05/2013	5.5	3.3	0.0	5.0	0.0	0.0	
06/2013	0.0	1.6	0.0				
07/2013	52.5	2.5					
08/2013	0.0	2.5	0.0	2.5			
09/2013	0.0	8.0	0.0			0.0	ANTHON TO PARTY AND THE PARTY OF THE PARTY O
10/2013	0.0	24.3	50.0	5.0			
11/2013	43.4	1.6		0.0	0.0	0.0	and the second s
12/2013	0.0	1.6	0.0	2.5	0.0	0.0	THE CONTROL OF SAME SHOWER THAT IS NOT THE
CY2013 TOTAL	141.3	55.4	100.0	32.5	0.0	<del></del>	**************************************
UNIT PRICE	\$ 38.25		\$ 45.00		\$ 31.00		
CY2013 COST	\$ 5,404.73		\$ 4,500.00	and the second s	\$ -		
01/2014	0.0	1 6		^^	0.0	ΕΛ	CONTRACTOR OF CO
02/2014	0.0	1.6 8.4	0.0	0.0 0.0	0.0		AN METER AND THE CONTRACTOR OF
03/2014	0.0	0.0		7.5	0.0		***
04/2014	0.0	1.9	0.0	7.5 0.0	0.0	<del>(</del>	
	1.0			0.0	0.0		
05/2014		1.6			***************************************		
06/2014	0.0	3.3	0.0	10.0	0.0		
07/2014	1.0	6.0	0.0	5.0	0.0	The second secon	
08/2014	7.0	7.6	0.0	7.5	0.0		
09/2014	1.0	17.2	0.0	15.0	0.0		
10/2014	0.0	2.5	0.0	2.5	0.0		
11/2014	0.0	0.0	0.0	0.0	0.0		
12/2014 CV2044 TOTAL	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		<b>&gt;</b>		<b>&gt;</b> -		***************************************
01/2015	2.0	0.0	0.0	3.0	0.0	5.0	and the second s
02/2015	2.0	0.0	0.0	0.0	0.0	0.0	Accessed the appropriate to the stage of
03/2015	0.0	6.7	0.0	0.0	0.0	0.0	and the same of th
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		7.0			
09/2015	2.0	1.7	0.0	3.5	0.0	0.0	The state of the s
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	waterida Milana war arkenin di Petrapanana re	\$ 45.00		\$ 31.00		
CY2015 COST	\$ 3,037.05		\$ 1,350.00	······································	\$ -		a control of page and process and designing against two
TOTAL GALLONS	230.7		130.0		0.0		man or
UNIT PRICE	\$ 38.25		\$ 45.00		\$ 31.00		TO SEE SECTION OF THE PARTY OF
3 YEAR COST	\$ 8,824.28		\$ 5,850.00		\$ -		
PREVIOUS STOCK	17.4		39.5	oma o Artist Magazina de ses formados y casas en como de la como d La como de la como de	30.0		
CY2013 PURCHASE	141.3		100.0		0.0		
CY2013 USED		55.4		32.5		10.0	· · · · · · · · · · · · · · · · · · ·
CY2014 PURCHASE	10.0	JJ. 7	0.0		0.0		
CY2014 PORCHASE	10.0	53.4		47.5		10.0	
CY2015 PURCHASE	79.4	JJ.4	30.0	77.3	0.0	20.0	
CY2015 PORCHASE	/ 3.4	16.5	30.0	37.0		10.0	Marrie Schoolings and all 18 17 annual control
TOTAL:	230.7	125.3	130.0	117.0	0.0	30.0	
		143.3		11/.0		30.0	****
CURRENT BALANCE	122.8		52.5		0		

				<u> </u>			<u> </u>		
STOCK @ 10/30/2015	RoundUp		A	quaMaster		KI	eenUp Pro		
GALLONS:			4.00						
Hana	-		1.99			0			
Lahaina	-		46.76	<del>                                     </del>		45	1		
Lanai Makawao			25			0			
Molokai			15			5			
Wailuku	-		0			0 2.5	+		
TOTAL:			92.75	+		52.5			
TOTAL.			32.73			32.3			
	RoundUp			AquaMaster			KleenUp Pro		
GALLONS:	purchase	use	STOCK	purchase	use	STOCK	purchase	use	STOCK
NOVEMBER 2015									
Hana	0	0.55	1.44	0	0	0	<b>†</b>		
Lahaina	0	0	46.76	0	0	45	1		
Lanai	0	0	25	0	0	0			
Makawao	16.7	2	29.7	0	0	5			,
Molokai	0	0	4	0	0	0	+	the source of the second	`
Wailuku	16.7	0	16.7	0		2.5			(
TOTAL:	33.4	2.55	123.6	0	0	52.5	0	0	
DECEMBED 2045									
DECEMBER 2015			0.74	<del>  </del>			1777		
Hana	0	0.7	0.74	0	0	0			
Lahaina	0	0	46.76	0	0	45	<del> </del>		
Lanai	0	0	25	0	0	0	<del>   </del>		
Makawao	0	0	29.7	0	0	5			
Molokai Wailuku	0	0	16.7	0	0	2.5	1		
TOTAL:	0	0.7	122.9	0	0	52.5	0	0	(
JANUARY 2016									
Hana	0	0	0.74	0	0	0			
Lahaina	0	0	46.76	0	0	45			
Lanai	0	0	25	0	0	0			
Makawao	0	0.1	29.6	0	0	5	1		
Molokai	0		4	0	0	0			
Wailuku	0		15.95	0		2.5			
TOTAL:	0	0.85	122.05	0	0	52.5	0	0	
FEBRUARY 2016									
Hana	0	0	0.74	0	0	0			
Lahaina	0	0	46.76	0	0	45			
Lanai	0	0	25	0	0	0		<del></del>	
Makawao	0	0	29.6	0	0	5			
Molokai	0	0	4	0	0	0			
Wailuku	0	0.75	15.2	0		2.5			<u> </u>
TOTAL:	0	0.75	121.3	0	0	52.5	0	0	
						THE PERSON NAMED IN COLUMN TO A PARTY OF THE PERSON NAMED IN COLUMN TO A PARTY			
03/15/2016									-
NOTES:									
a) 1 oz = 0.0078125 gallons			<b></b>						<del> </del>