

LUSAKA CITY COUNCIL WASTE MANAGEMENT UNIT

Updated 2005 Action Plans

November 2004

Job

Ref.No.

Edition 1.0

Prepd.

Checked

Appd.

DAB

WMU team

JGT

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1. Objective 1: Waste Reuse and Recycling

Waste amounts entering Waste Management chain reduced as much as possible

Objective	Description	Verifiable indicators	Means of verification	Assumptions
Long Term LWMP Objective	Sustainable and poverty oriented municipal solid waste management in Lusaka established thereby improving the living conditions of the population as a whole, especially the poor			
5 year Objective for Reuse & Recycling	1 To reduce the amounts of waste entering the waste management chain as much as possible by end 2006			
Outputs	Description	Verifiable indicators	Means of verification	Assumptions
	1.1 Revised deposit and refund system established Reduced amount of bottles disposed at the landfill		n/a	
	1.2 Collection system for waste paper and cardboard established., Reduction in the amount of paper and cardboard disposed at the landfill	Increased recycling of waste paper and card board, reduced waste disposal from target groups	WIS-system reporting shows reduced disposal from target groups	Involved industry and generators willing to support the activities Staff allocates time and co-ordinates activities
Activities	Description	Verifiable indicators	Means of verification	Assumptions
	1.1.1 Negotiate with shop keepers to establish deposit-refund system	NO ACTIVITIES IN 2005		
	1.2.1 To identify & approach key enterprises to sensitise those on potential in waste paper utilisation, mediate and possibly make voluntary agreements. Follow up			
Inputs	Description			
	1.2.1 Follow-up meetings and monitoring effect: 2,5 person weeks in 2005			

2. Objective 2: Waste Collection and Transport

An efficient waste collection and transport system in Lusaka established, ensuring that all waste is brought out of the City

Objective	Description	Verifiable indicators	Means of verification	Assumptions
Long Term LWMP Objective	Sustainable and poverty oriented municipal solid waste management in Lusaka established thereby improving the living conditions of the population as a whole, especially the poor			
5 year Objective Waste Collection and Transport	2 An efficient waste collection and transport system in Lusaka established, ensuring that all waste is brought out of the City			
Outputs	Description	Verifiable indicators	Means of verification	Assumptions
	2.1 Done			
High Priority	2.2 Waste collection initiated in all 12 WMDs in 2005, Littering reduced	Franchise contracts concluded with private waste management companies, companies started collection in the contracted areas		
	2.3 Done			
High Priority	2.4 Collected waste is transported from all peri-urban areas Waste dumping and accumulation in peri-areas stopped	Waste is collected from communal disposal points, waste heaps not present or do not increase in volume		
High Priority	2.5 Waste generated in peri-urban areas brought to secondary collection points, Secondary collection is being paid for	Communal disposal points used and WMC pays to LCC for secondary collection		
	2.6 In peri-urban areas disposal of sand is significantly reduced resulting in a drop in per capita waste generation from 0.6 to 0.5 kg per day.	Specific waste amounts from peri-urban areas reduced to 0.5 kg per capita per day		
	2.7 Litterbins in place and emptied as necessary by contractor in WMDs Activities in 2005 limited to WMD-D	Litterbins in place Litterbins do not overflow		

	2.8	Licensing and supervision of waste management (transportation) companies delegated by ECZ to LCC)	Agreement in place on exercise of licensing and supervision		
High Priority	2.9	Activities of waste management companies properly monitored and enforcement of waste management regulations in place See also 5.3	Waste generators satisfied with service bins, skips etc. emptied waste received at landfill and invoices paid	WIS complaint record sufficient monitoring by trained WMU staff WIS records, financial records	
Activities		Description	Verifiable indicators	Means of verification	Assumptions
Output 2.2	2.2.1	Finished			
	2.2.2	Tender remaining WMD's Monitor and provide assistance (see 2.9+5.3+5.4), Set-up WM systems in WMD-D, provide service Implement awareness campaign for fee/littering, monitor effect (see output 6) Secure waste producer fees (part of output 5.5)	Contracts concluded with companies, collection initiated and maintained 2004-2008 as to contracts. Waste generators satisfied with services, and contractual obligations fulfilled full cost recovery established by end 2005 and end 2008 in respective WMD's From 2005 litter reduced significantly (by eg. 10% annually)	Documentary, Contracts, monitoring reports and complaint register in WIS WMU financial reports Campaign materials, Inspections	
Output 2.3	2.3.1	Finished			
	2.4.1	Start up collection services in all 40 CBD's by 2005 and maintain secondary collection phased over the years 2004-2008 In 2005 procure trucks and tractor trailers Secure increasing cost recovery and full cost recovery by 2005 To prevent dumping of waste at cleared areas, Implement awareness campaign (see 2.2.2)	Waste Collection data showing stipulated waste removal from peri-urban areas Fee generation 60% by 2008 Waste is collected from communal disposal points, waste heaps not present or do not increase in volume	WMU-WIS WMU-Financial reporting system Inspections	

	<p>2.5.1 Establish playgrounds/parks at cleared areas</p> <p>Support and train new and existing Waste Management Committees (primary and secondary waste collection, fee collection etc) Maintain & follow up training especially where fee collection efficiency is low/goes down.</p> <p>Monitor ongoing</p>	<p>10 playgrounds established by 2008</p> <p>20 new WMC trained in 2004, remaining WMC trained by 2008 as to phased approach selected. Ongoing support and trouble shooting. Monthly WMC fee collection efficiency evaluated</p>	<p>Inspection</p> <p>Training materials, participation list</p> <p>WMU-financial reporting system</p>	
	<p>2.6.1 Produce leaflets, prepare campaign, define target groups, implement in 2002-2004-2006-2008, monitor results ongoing. (see also 7.2 litterbins)</p>	<p>Specific waste amounts from peri-urban areas reduced to 0.5 kg per capita per day</p>	<p>WMU-WIS, Inspections</p>	
	<p>2.7.1 Introduce obligations to put up litterbins in front of shops (jointly/separately) by end 2005</p> <p>Oblige contractors to empty the bins, motivate to advertise on bins by 2005</p> <p>Activities only in WMD-D in 2005</p>	<p>Litterbins in place</p> <p>Litterbins do not overflow</p>	<p>Inspections</p>	
	<p>2.8.1 Coordinate licensing of waste transporters with ECZ by 2004</p>	<p>Agreement in place on exercise of licensing and supervision</p>	<p>Documentary</p>	
	<p>2.9.1 Inspection of WMD's weekly, monthly meetings with waste contractors</p> <p>Inspections throughout of Lusaka City. incl illegal dumping weekly. Complaints and follow-up ongoing</p> <p>Training/advising waste committees in peri-urban areas, inspections regularly (See also activity 3.5.1)</p>	<p>Waste generators satisfied with service bins, skips etc. emptied</p> <p>waste received at landfill and invoices paid</p>	<p>WIS complaint record</p> <p>Sufficient Monitoring by trained WMU staff</p> <p>WIS records, financial records</p>	
Inputs	Description			
2.2.1-2	<p>Tender remaining WMD's: 7 person weeks in 2005</p> <p>Monitor and provide assistance (see 2,9+5,3+5,4), Set-up WM systems in WMD-D, provide service:50 person weeks in 2005</p> <p>Implement awareness campaign for fee/littering, monitor effect (see output 6), Secure waste producer fees (part of output 5.5) :10 person weeks (4+6) in 2005</p>			

2.4.1	<p>Start up collection services in all 40 CBD's by 2005 and maintain secondary collection phased over the years 2004-2008:: 66 person weeks in 2005</p> <p>Secure increasing cost recovery and full cost recovery by 2005: 18 person weeks in 2005</p> <p>Implement awareness campaign: (see 2.2.2)</p>
2.5.1	<p>Support and train new and existing Waste Management Committees (primary and secondary waste collection, fee collection etc) 1 person week in 2005</p> <p>Maintain & follow up training especially where fee collection efficiency is low/goes down., Monitor ongoing 17 person weeks in 2005</p>
2.6.1+ 2.7	<p>Produce leaflets, prepare campaign, define target groups, implement in 2002-2004-2006-2008, monitor results ongoing, (see also 2.7 litterbins)</p> <p>0,5 person weeks in 2005</p>
2.7.1	<p>Introduce obligations to put up litterbins in front of shops (jointly/separately) by end 2005, Oblige contractors to empty the bins, motivate to advertise on bins by 2005, Activities only in WMD-D in 2005,</p> <p>2 person weeks in 2005</p>
2.8.1	<p>Coordinate licensing of waste transporters with ECZ by 2004:</p> <p>0,5 person weeks in 2005,</p>
2.9.1	<p>Inspection of WMD's weekly, monthly meetings with waste contractors, Inspections throughout of Lusaka City. incl illegal dumping weekly. Complaints and follow-up ongoing</p> <p>Training/advising waste committees in peri-urban areas, inspections regularly,(See also activity 3.5.1), 51 person weeks in 2005</p>

3. Objective 3: Waste Disposal

Municipal Solid Waste disposed of without risk for environment and public health

Objective	Description	Verifiable indicators	Means of verification	Assumptions
Long Term LWMP Objective	Sustainable and poverty oriented municipal solid waste management in Lusaka established thereby improving the living conditions of the population as a whole, especially the poor			
5 year Objective Waste Disposal	3 Municipal Solid Waste disposed of without risk for environment and public health			
Outputs	Description	Verifiable indicators	Means of verification	Assumptions
High Priority	3.1 Environmentally sound waste disposal site established and operational by end 2005	Landfill operational		That ECZ provides policies and guidelines as hazardous/health care waste management falls under their auspice
High Priority	3.2 From end 2005 food waste is no longer recovered and brought into communities. Other waste picking controlled. Hazardous waste properly managed by end 2005	Authorised persons collecting agreed waste only	spot checks of documents and collected waste self-control by waste pickers	
High Priority	3.3 Chunga site is continuously operated and improved in line with EIA approval and guidelines established (new)	Site impact on environment and public health minimised, daily operation follows workplace standards and landfill policy.	Inspection of site monitoring program reports and reports from biannual health check of operating staff	
Activities	Description	Verifiable indicators	Means of verification	Assumptions
	3.1.1 Design, obtain EIA approval, finalise design in 2004, tendering and construct new landfill during 2005. Landfill put into operation by end 2005. Supervision by WMU staff from end 2005	ECZ letter of acceptance tender documents and signed contract with construction company Landfill in operation	Inspection of documents Site inspection	Funds available from Danida Funds made available at latest by mid 2005

	3.2.1 Fence site, create office, establish policy by end 2004, Establish procedures and conditions for waste picking, formalise an agreed and tolerable waste picking by authorising individuals, enforce by end 2005. Participate in the ECZ task group re. hazardous waste management	Documents and authorisation in place, procedures followed by authorised individuals	Documentary spot checks, self-control within authorised pickers	
	3.3.1 Operate, maintain and improve site continuously, procure install, use and maintain equipment, monitor site systematically. Develop operating manual including measures/plans for future closure by 2005, provide training by 2005	Site operation follows modern landfill principles and is undertaken by trained staff	site inspections, interviews of operation staff	
Inputs	Description			
	3.1.1 Design, obtain EIA approval, finalise design in 2004, tendering and construct new landfill during 2005. Landfill put into operation by end 2005. Supervision by WMU staff from end 2005: 19 person weeks in 2005 ,			
	3.2.1 Fence site, create office, establish policy by end 2004, Establish procedures and conditions for waste picking, formalise an agreed and tolerable waste picking by authorising individuals, enforce by end 2005, Participate in the ECZ task group re. hazardous waste management, 15 person weeks in 2005			
	3.3.1 Operate, maintain and improve site continuously, procure install, use and maintain equipment, monitor site systematically, Develop operating manual including measures/plans for future closure by 2005, provide training by 2005: 24 person weeks in 2005			

4. Objective 4: Clean-up of Accumulated Waste

A waste free environment for the inhabitants of Lusaka ensured

Objective	Description	Verifiable indicators	Means of verification	Assumptions
Long Term LWMP Objective	Sustainable and poverty oriented municipal solid waste management in Lusaka established thereby improving the living conditions of the population as a whole, especially the poor			
5 year Objective Clean-up of Accumulated Waste	4 A waste free environment for the inhabitants of Lusaka ensured			
Outputs	Description			Assumptions
Priority 1	4.1 Clean-up operation and transport of piled-up waste in city and peri-urban areas	No visible accumulated waste in the City by 2008	Inspections	
Activities	Description	Verifiable indicators	Means of verification	Assumptions
	4.1.1 Conduct clean-up operations for at least 25 days annually for piled up waste in period 2004-2008	clean-up waste received at landfill site	Inspection of landfill records/WIS system	
Inputs	Description			
	4.1.1 Conduct clean-up operations for at least 25 days annually for piled up waste in period 2004-2008; 2 person weeks in 2005,			

5. Objective 5: Institutional Development

Institutional Framework for waste management in place

Objective	Description	Verifiable indicators	Means of verification	Assumptions
Long Term LWMP Objective	Sustainable and poverty oriented municipal solid waste management in Lusaka established thereby improving the living conditions of the population as a whole, especially the poor			
5 year Objective Institutional Development	5 Institutional Framework for waste management in place			
Outputs	Description			Assumptions
Re Objective 1 Priority 1	5.1 Municipal Waste Management by-law with WMU-statutes gazetted by mid 2005 and implemented ongoing	Municipal Waste Management by-law and statutes for WMU WMU in place and working, fulfilling tasks and obligations		By-law gazetted by beginning 2005
	5.2 WMU established by 2003 and in operation	Municipal Waste Management by-law and statutes for WMU		
Priority 1	5.3 Proper control of waste management companies	2 more inspectors appointed in 2005		
	5.4 Perpetrators fined or prosecuted	court cases, fines issues		
Priority 1	5.5 Waste Management Committees (WMC's)s established and working	WMCs established and working		
	5.6 Waste Information System operational and containing necessary data for WMU's waste management services, planning, control, follow-up and informed decision making.			
Activities	Description	Verifiable indicators	Means of verification	Assumptions

	5.1.1 Facilitate and continuously follow-up on the drafted waste management by-law for gazetting by beginning 2005 Implement and enforce by-law	Tasks carried out by qualified, trained staff by 2006		
	5.2.1 Establish WMU by 2003, fine-tune WMU by 2005. Continuously streamlining of tasks and staff in 2005-2008. Employ sufficient staff and train staff, establish system tools etc. by end 2005 undertake annual rolling update of strategies and action plans			
	5.3.1 Appoint 2 additional waste inspectors (linked with output 2.9)			
	5.4.1 From by-law adoption fine and prosecute perpetrators as required	Fee collection increasing , illegal dumping decreasing, court cases brought forward	Inspection of reports, WIS-register,	
	5.5.1 Establish and support WMC's Guide & train WMC in performance of duties Continuously interlinking with WMU after establishment Ensure sufficient & qualified staffing from 2004 onwards	see 2.5.1	see 2.5.1	
	5.6.1 Train all users in the developed Information System Feed waste info into system ongoing Generate required technical and financial output for WMU and other stakeholders as required Develop a monitoring & evaluation system inc. a waste manifest which contractors will submit to WMU by mid 2005	Staff operated WIS in place	Inspection and testing of system by key user(s)	
Inputs	Description			
	5.1.1 Follow-up on by-law for gazetting beginning 2005 1 person weeks in 2005 Implement and enforce by-law: 4 person weeks in 2005			

	5.2.1 Establish WMU by 2003, fine-tune WMU by 2005. Continuously streamlining of tasks and staff in 2005-2008. Employ sufficient staff and train staff, establish system tools etc. by end 2005, undertake annual rolling update of strategies and action plans: 26 person weeks in 2005 Employ/train sufficient staff: 5 person weeks in 2005
	5.3.1 Appoint 2 additional waste inspectors, train: 2 person week in 2005,
	5.4.1 From by-law adoption fine and prosecute perpetrators as required: 9 person weeks in 2005
	5.5.1 Establish and support WMC's, Guide & train WMC in performance of duties, Continuously interlinking with WMU after establishment, Ensure sufficient & qualified staffing from 2004 onwards: 28 person weeks in 2005 see also 2.5.1
	5.6.1 Train all users in the developed Information System, Feed waste info into system ongoing, Generate required technical and financial output for WMU and other stakeholders as required, Develop a monitoring & evaluation system inc. a waste manifest which contractors will submit to WMU by mid 2005: 64 person weeks in 2005

6. Objective 6: Public Awareness Raising

The public in general and the public in the peri-urban areas in particular aware of the risks of improper waste management and the benefits of proper waste management

Objective	Description	Verifiable indicators	Means of verification	Assumptions
Long Term LWMP Objective	Sustainable and poverty oriented municipal solid waste management in Lusaka established thereby improving the living conditions of the population as a whole, especially the poor			
5 year Objective Public Awareness Raising	6 The public in general and the public in the peri-urban areas in particular aware of the risks of improper waste management and the benefits of proper waste management			
Outputs	Description			Assumptions
Re Objective 1	6.1 Waste Management Committees and other organisations working in peri-urban areas supported in conducting public awareness campaigns.	WMCs established and training conducted; campaign materials elaborated and published. Continuously from 2004 and onwards		
	6.2 General public in peri-urban areas are aware of the need to reduce the soil content in the waste generated in these areas.(see also 2.6)			
	6.3 General public awareness campaigns in Lusaka on solid waste management held			
Activities	Description	Verifiable indicators	Means of verification	Assumptions
	6.1.1 Assist the WMC's by: Disseminate the developed material in close cooperation with the local WMCs. Cooperating with NGOs, donor organisations and similar bodies all over Lusaka, but especially in the peri-urban areas. To be co-ordinated with activity 2.5.1			

	<p>6.2.1 WMU and WMC's will together:</p> <p>Plan and implement a special public awareness campaign for reducing soil content in yard sweeps from high-density and peri-urban areas.</p> <p>Monitor the effect of the campaign and adjust it to give the highest effect.</p> <p>The activity must be co-ordinated with activity 2.5.1</p>			
	<p>6.3.1 To organise and conduct public awareness campaigns all over Lusaka including advertising and awareness campaigns in all mass media.</p> <p>To implement awareness campaign in all WMD's from 2005 to reduced littering (from 2.2.2)</p>	Awareness campaign material in place	Inspection of material	
Inputs	Description	Verifiable indicators	Means of verification	Assumptions
	<p>6.1.1 Assist the WMC's by disseminating developed material in close cooperation with the local WMCs, Cooperating with NGOs, donor organisations and similar bodies all over Lusaka, but especially in the peri-urban areas, To be co-ordinated with activity 2.5.1, 4,5 person weeks in 2005</p>			
	<p>6.2.1 WMU and WMC's will together Plan and implement a special public awareness campaign for reducing soil content in yard sweeps from high-density and peri-urban areas. Monitor the effect of the campaign and adjust it to give the highest effect. The activity must be co-ordinated with activity 2.5.. 2 person weeks in 2005</p>			
	<p>6.3.1 To organise and conduct public awareness campaigns all over Lusaka including advertising and awareness campaigns in all mass media, To implement awareness campaign in all WMD's from 2005 to reduced littering (from 2.2.2) General public awareness campaign implemented: 5 person weeks in 2005,</p>			

7. 2005-2009 Implementation Plan

Implementation Plan 2004-2009	Resp/	2004				2005				2006				2007				2008				2009			
	Supp	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
1. Waste amounts reduced as much as possible		n/a in 2004-5 plan period																							
1.1 Revised deposit/refund system established, reduced amount of bottles disposed at landfill																									
1.2 Collection system for waste paper/cardboard established, Reduction in paper/cardboard at landfill	IM/JM		-				-	X			-				-				-				-		
2. Efficient coll./transp.system established, ensuring all waste is brought out of the City																									
2.1 Waste collection initiated in 4 WMDs, Littering reduced	Done	X	-	-	-	-	-	X	first 7 areas																
2.2. Waste collection initiated in all 12 WMDs, Littering reduced	MK					-	-	X	next 5 areas																
2.3 Waste collected & /transp.from selected peri-urban areas; waste dumping and accumulation stopp	Done		X																						
2.4 Collected waste collected & transp. from all peri-urban areas; waste dumping in areas stopped	RM/CM								X																
2.5 Waste in peri-urban areas brought to secondary collection points, Secondary collection paid for	CM/RM		X																						
2.6 In peri-urban areas sand not disposed and per capita waste generation dropped to 0.5 kg/capita/da	CM/RM																								X
2.7 Litterbins in place and emptied as necessary by contractor in WMDs	MK/IM																								
2.8 Licensing & supervision of waste mananag/transportation companies delegated by ECZ to LCC	MK								X																
2.9 Waste man. companies activities properly monitored; enforcement of waste man. regulations in pla	MK																								
3. Solid Waste disposed of without risk for environment and public health																									
3.1 Environmentally sound waste disposal site established and operational	DN		-	-	-		-	-	X																
3.2 Food waste not recovered/brought into communities; hazardous waste properly managed	DN							X																	
3.3 Chunga site is continuously operated and improved in line with EIA approval and guidelines establ.	DN		-	-	-		-	-	-																→
4. A waste free environment for the inhabitants of Lusaka ensured																									
4.1 Clean-up operation and transport of piled-up waste in city and peri-urban areas	DN																								
5. Institutional Framework for waste management in place																									
5.1 Municipal Waste Management by-law with WMU-statutes gazetted by mid 2005 and implemented	MK								X																→
5.2 WMU established by 2003 and in operation	MK/all	X																							→
5.3 Proper control of waste management companies	MK/all																								→
5.4 Perpetrators fined or prosecuted	IM/JM								X																→
5.5 Waste Management Committees (WMC's)s established and working	RM/CM												X												→
5.6 WIS operational with data for WMU's services, planning, control, follow-up and informed decisio	MM/LC			X																					→
6. Public aware of risks of improper waste man. and benefits of proper waste man.																									
6.1 WMC's and other org. working in peri-urban areas supported in conducting awareness campaigns	CM/RM		-	-	-		-	-	-																
6.2 Public in peri-urban areas aware of need to reduce soil content in waste generated in these areas.	CM/RM																								
6.3 General public awareness campaigns in Lusaka on solid waste management held	CM/RM																								

Ref.No

X = Output is finalised and succes criteria measured and reported in written progress reports to WMU head

8. 2005 Priority Activity Plan

Priority Interventions in 2005	Resp/ Supp.	2005											
		Jan	Feb	Mar	April	May	June	July	Aug	Sept	Okt	Nov	Dec
1. Waste amounts reduced as much as possible													
1.2 Coll. system for paper/cardboard establ. Reduction at landfill	IM/JM												
Follow-up on achievements from 2004	IM/JM						X					X	
2. Efficient coll./transp. system ensuring all waste out of the City													
2.2. Waste collection initiated in all 12 WMDs. Littering reduced	MK												
tender 2 +2 WMD	MK	—											
Monitor and provide assistance	IM/JM	—											
Set-up WM systems in WMD-D, provide service	IM/JM	—											
Implement awareness campaign for fee/littering, monitor effect (see output 6)	CM/RM												
Secure waste producer fees (part of output 5.5)	IM/CM		X							X		X	
2.4 Waste coll/transp. from all peri-urban areas; waste dumping stopped	RM/CM	—											
Start up collection in all 40 CBD,	IM/JM	—											
Maintain sec. collection,	IM/JM	—											
ensure increasing cost recovery	RM/CM	—											
Implement Awareness Campaign (see output 6)	RM/CM			X			X			X		X	
2.5 Peri-urban waste brought to sec. coll.points, Sec. collection paid for	CM/RM												
Establish playgrounds	CM/RM		X			X				X			
Support & train new/existing WMC's	CM/RM	—											
Maintain & follow-up especially in low fee-collection efficiency areas	CM/RM	—											
Monitor ongoing	CM/RM	—											
2.6 In peri-urban areas sand not disposed/ waste generation reduced.	CM/RM												
Produce materials, define target groups, implement, monitor	CM/RM				X					X			
2.7 Litterbins in place and emptied as necessary by contractor in WMDs	MK												
In WMD-D only: Obligations for contractors to put up and empty litterbins	MK		X			X			X				X
2.8 Licensing & supervision of WM companies delegated by ECZ to LCC	MK												
Discuss with ECZ on co-ordination of waste transporters licences	MK			X				X				X	
2.9 WM companies monitored; enforcement of WM regulations in place	MK												
Inspection of WMD's, meetings with waste contractors	IM/JM	—											
Inspections in Lusaka City, complaints and follow-up	IM/JM	—											
Training/advising WMC's in peri-urban areas, inspections	IM/JM	—											
Appointing 2 additional waste inspectors (see also output 5.3)	MK	X											
3. SW disposed of without risk for environment/public health													
3.1 Waste disposal site established and operational	DN												
Site tendering and company selection	DN												
overviewing site construction	DN												
site put into operation	DN												
Supervision	DN												
3.2 Food waste not recovered; hazardous waste managed	DN												
Establish policy and procedures for site running	DN	—											
Establish waste picking conditions, authorise individuals	DN	—											
Enforce policy, procedures and authorisations	DN												
3.3 Chunga continuously operated/improved as to EIA/guidelines.	DN												
Operate, maintain and improve site ongoingly	DN	—											
Procure, install, use, maintain equipment,	DN												
Monitor site systematically	DN												
Develop operating manual, closure plans, provide training	DN												

Priority activity plan continued...

Priority Interventions in 2005 -page 2	Resp/ Supp.	2005											
		Jan	Feb	Mar	April	May	June	July	Aug	Sept	Okt	Nov	Dec
4. A waste free environment for the inhabitants of Lusaka ensured													
4.1 Clean-up operation of piled-up waste in city/peri-urban areas	DN												
Conduct clean-up campaign or piled up waste	DN	X		X		X		X		X		X	
5. Institutional Framework for waste management in place													
5.1 Municipal WM by-law gazetted and implemented	MK												
Follow-up on WM-by-law, gazetting mid 2005	MK		X										
Implement and enforce by-law from adoption	IM/JM	---	---	---	---	---	---	---	---	---	---	---	---
5.2 WMU established by 2003 and in operation	MK												
finetune WMU, streamline tasks, responsibilities, systems	MK/all	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
appoint sufficient staff, Train staff	MK/all	x	---	as required			x			x	---	x	
5.3 Proper control of waste management companies (see also 5.4)	MK												
Appointing 2 additional waste inspectors	MK	X											
5.4 Perpetrators fined or prosecuted	IM/JM												
Prosecute perpetrators as required	IM/JM		X		X		X	X		X	X	X	
5.5 WMCs established and working	RM/CM												
Establish and support WMC's	RM/CM	---	---	---	---	---	---	---	---	---	---	---	---
Guide & train WMC in performance of duties	RM/CM	X	X	X	X	X	X	X	X	X	X	X	X
Continuously interlinking with WMU	RM/CM		X	X	X	X	X	X	X	X	X	X	X
Ensure sufficient/qualified staffing from 2004	MK	→											
5.6 WIS operational for WMU needs etc.	MM/LC												
Train all users in the developed information system	MM/LC	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Feed waste data and info into system	MM/LC	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Generate required output for WMU/stakeholders	MM/LC	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Develop a monitoring & evaluation system inc. waste manifest	MM	---	---	---	---	---	---	---	---	---	---	---	---
6. Public aware of risks of improper WM and benefits of proper WM.													
6.1 WMC's in peri-urban areas supported in awareness campaigns	CM/RM	---	---	---	---	---	---	---	---	---	---	---	---
Disseminate developed materials in close co-operation with WMC's	CM/RM		---	---	---	---	---	---	---	---	---	---	---
Co-operation with other organisations especially re. Peri-urban areas	CM/RM			X		X			X			X	
6.2 Public in peri-urban areas aware of soil content reduction in waste.	CM/RM												
WMU/WMC plans/impl. PA-campaign re. Soil reduction in street sweeps	CM/RM		---	X			X		X			X	
Monitor campaign effect	CM/RM		---		X		X		X			X	
6.3 General public awareness campaigns in Lusaka on SW man. held	CM/RM												
Organise & conduct PA campaigns all over Lusaka incl. mass media	CM/RM		---	X					X				
Monitor campaign effect	CM/RM				X				X				

X = Output is finalised and succes criteria measured and reported in written progress reports to WMU head

9. 2005 WMU Staff-Time Break Down

Figures in person weeks (1 person week is 40 hours),

		MK	DN	Op2	CM	RM	LC	MM	IM	JM	insp3	insp4	p-weeks
1. Waste amounts reduced as much as possible													
<u>1.2 Coll. system for paper/cardboard establ. Reduction at landfill</u>	IM/JM												
Follow-up on achievements from 2004	IM/JM	0,5							1	1			2,5
2. Efficient coll./transp. system ensuring all waste out of the City													
<u>2.2. Waste collection initiated in all 12 WMDs, Littering reduced</u>	MK/IM/JM								10	10	13	13	46
tender 2 +2 WMD	MK	1	2										3
Monitor and provide assistance	IM/JM												
Set-up WM systems in WMD-D, provide service	IM/JM	1											1
Implement awareness campaign for fee/littering, monitor effect (see output 6)	IM/JM				2	2							4
Secure waste producer fees (High priority, part of output 5.5)	IM/CM/LC				2	2	2						6
<u>2.4 Waste coll/transp. from all peri-urban areas; waste dumping stopped</u>	RM/CM	2	9	9					10	10	13	13	66
Start up collection in all 40 CBD,	IM/JM												
Maintain sec. collection,	IM/JM												
Ensure increasing cost recovery (high priority)	RM/CM				8	8	2						18
Implement Awareness Campaign (see output 6)	RM/CM												
<u>2.5 Peri-urban waste brought to sec. coll.points, Sec. collection paid for</u>	CM(RM)	1			8	8							17
Establish playgrounds (lower priority)	CM/RM												
Support & train new/existing WMC's (high priority)	CM/RM												
Maintain & follow-up especially in low fee-collection efficiency areas (high priority)	CM/RM												
Monitor ongoing	CM/RM												
<u>2.6 In peri-urban areas sand not disposed/ waste generation reduced.</u>	CM/RM				0,5								0,5
Produce materials, define target groups, implement, monitor (limited activity)	CM/RM												
<u>2.7 Litterbins in place and emptied as neces-sary by contractor in WMDs</u>	MK	0,5											0,5
In WMD-D only: Obligations for contractors to put up and empty litterbins	CM/RM								1	1			2
<u>2.8 Licensing & supervision of WM companies delegated by ECZ to LCC</u>	MK	0,5											0,5
Discuss with ECZ on co-ordination of waste transporters licences	MK												
<u>2.9 WM companies monitored; enforcement of WM regulations in place</u>	IM/JM	3							12	12	12	12	51
Inspection of WMD's, meetings with waste contractors	IM/JM												
Inspections in Lusaka City, complaints and follow-up	IM/JM												
Training/advising WMC's in peri-urban areas, inspections	IM/JM												
Staffing -See output 5.3 (merged)	IM/JM												
3. SW disposed of without risk for environment/public health													
<u>3.1 Waste disposal site established and operational</u>	DN	1	9	9									19
Site tendering and company selection	DN												
overviewing site construction	DN												
site put into operation	DN												
Supervision	DN												
<u>3.2 Food waste not recovered; hazardous waste managed</u>	DN	1	8	6									15
Establish policy and procedures for site running	DN												
Establish waste picking conditions, authorise individuals	DN												
Enforce policy, procedures and authorisations	DN												
<u>3.3 Chunga continuously operated/improved as toEIA/guidelines.</u>	DN	2	8	14									24
Operate, maintain and improve site ongoingly	DN												
Procure, install, use, maintain equipment,	DN												
Monitor site systematically	DN												

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 IM: Imuwana Mwanamwalye
 MK: Michael Kabungo
 RM: Rudice Mabaluki
 JM: Jon (Ian) Mwango
 DN, Dominique Ndhlovu
 LC Larry Chimamu
 MM: Mutemwa Mutemwa
 insp3: new inspector 3
 insp4: new inspector 4
 Op2: New Operations Off.

WMU staff-time break down table continued

Figures in person weeks (1 person week is 40 hours),													
		MK	DN	Op2	CM	RM	LC	MM	IM	JM	insp3	insp4	
4. A waste free environment for the inhabitants of Lusaka ensured													
4.1 Clean-up operation of piled-up waste in city/peri-urban areas	DN												0
Conduct clean-up campaign of piled up waste (DN 2 weeks)	DN		1	1									2
5. Institutional Framework for waste management in place													
5.1 Municipal WM by-law gazetted and implemented	MK												0
Follow-up on WM-by-law, gazetting mid 2005	MK	1											1
Implement and enforce by-law from adoption	IM/JM	2							1	1			4
5.2 WMU established by 2003 and in operation	MK												
finetune WMU, streamline tasks, responsibilities, systems , maintenance	MK/all	6	2		1	1	2	10	2	2			26
appoint sufficient staff, Train staff	MK/all	5											5
5.3 Proper control of waste management companies (see also 5.4)	MK												
Appointing 2 additional waste inspectors	MK	2											2
5.4 Perpetrators fined or prosecuted	IM/JM	2							2	2	2	2	10
Prosecute perpetrators as required	IM/JM												0
5.5 WMCs established and working (high priority)	RM	3			12	13							28
Establish and support WMC's	RM/CM												
Guide & train WMC in performance of duties	RM/CM												
Continuously interlinking with WMU	RM/CM												
Ensure sufficient/qualified staffing from 2004	MK												
5.6 WIS operational for WMU needs etc	MM/LC	2					33	29					64
Train all users in the developed information system	MM/LC												
Feed waste data and info into system	MM/LC												
Generate required output for WMU/stakeholders	MM/LC												
Develop a monitoring & evaluation system inc. waste manifest	MM												
6. Public aware of risks of improper WM etc.													
6.1 WMC's in peri-urban areas supported in awareness campaigns	CM	0,5			2	2							4,5
Disseminate developed materials in close co-operation with WMC's	CM/RM												
Co-operation with other organisations especially re. Peri-urban areas	CM/RM												
6.2 Public in peri-urban areas aware of soil content reduction in waste .	CM	0,5			1	0,5							2
WMU/WMC plans/impl. PA-campaign re. Soil reduction in street sweeps	CM/RM												
Monitor campaign effect	CM/RM												
6.3 General public awareness campaigns in Lusaka on SW man. held	CM	1			2	2							5
Organise & conduct PA campaigns all over Lusaka incl. mass media	CM/RM												
Monitor campaign effect	CM/RM												
Time available to non-planned tasks (weeks):		9	9	9	9	9	9	9	9	9	9	9	99
Total person weeks for WMU key staff:		48	48	48	48	48	48	48	48	48	49	49	528,5
		each staff: 48 working weeks + 4 holiday weeks= 52 weeks											or 11 years

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