

CITY OF HARARE

Date: 6 February 2023

ACTING TOWN CLERK'S REPORT TO THE SPECIAL COUNCIL MEETING

- 1. <u>SUBJECT: STATUS OF WASTE MANAGEMENT IN HARARE, COURSE OF ACTION AND SUSTAINABILITY MEASURES</u>
- 2. RESPONSIBLE HEAD REPORTING:

Acting Director of Works

- 3. OTHER DEPARTMENTAL HEADS CONSULTED: Acting Director of Finance
- 4. RECOMMENDATIONS:
 - 4.1 That Council notes the current status of Waste Management in the City.
 - 4.2 That Council notes and approve the proposed wayforward for sustainable solid waste management in the City of Harare.
- 5. <u>RELEVANT INFORMATION</u>
- 5.1. Status of Waste Management

5.1.1 Situational Analysis as at 6 February 2023

The summary of the current status of the door-to-door refuse collection backlogs in the City is summarized in the table 1 below:

Table 1: Current status of the door-to-door refuse collection

BACKLOG STATUS	NUMBER OF AREAS	
Up to Date	18	
1 Week	16	
2 Weeks	1	
TOTAL	35	

Currently the City is operating on a two (2) week refuse collection cycle where residents get their bins collected once in two (2) weeks. Compliance to the revised schedule is currently at 90%. However, due to the current frequency of collection, multiple occupancy, Illegal vending (particularly in the CBD a shopping Centres) and densification of properties, refuse dumps have resurfaced in most residential areas.

5.1.2 Refuse Collection Efficiency (%)

The refuse collection efficiency for January 2023 stood at 50% Due to breakdowns and lack of maintenance consumables.

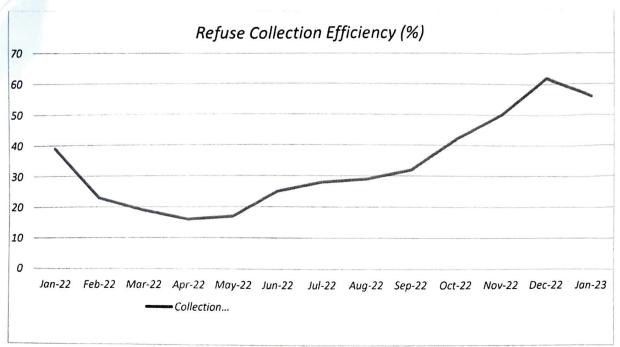


Figure 1: Refuse Collection Efficiency Jan 2021 – Jan 2023

5.1.3 Refuse Collection Fleet Availability (%)

The key refuse collection fleet (compactors, skip trucks, tipper trucks) availabilities for the period January 2023, stood below average 45% (See Figure 2 and Annexure 1 for Mechanical and Electrical Services Report for Fleet Repairs).

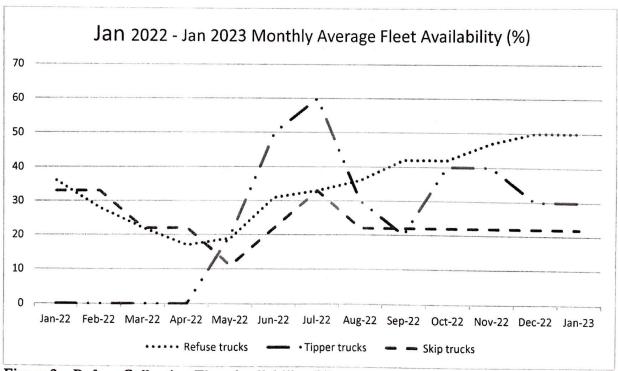


Figure 2 - Refuse Collection Fleet Availability (%)

5.1.4 Refuse Dumps and Skip Point Spillages

The City currently has an estimated minimum number of 610 mapped refuse dumps which are scattered throughout the City and are being subjected to quantity revalidation. The City fairly achieved its dump clearance plan with little or no success on sustainability due to the high recurrence rate of the dumps. This situation is dire poses a public health hazard which urgently calls for urgent intervention.

The City skip points are characterized by high recurrence rate of waste spillages resulting from challenges pertaining to reduced door-to-door refuse collection frequency and low Skip Truck availability.

5.1.5 Administrative Issues

(a) Procurement Issues

(i) Purchase Orders

- Delays in Purchase Orders Authorization has cumulatively resulted in prolonged procurement lead times and price variations without timeous delivery of spares.
- Bureaucratic procurement and payment systems notwithstanding the need for due processes and controls.

(b) Capital/Devolution Projects

Table 2: Summary Status of Procurement under Devolution/Capital projects

No.	Project/Contract	Contractor	Qty	Status/Remarks
1.	Supply and Delivery of Tipper	Conplant	10	Contract signed.
	Trucks			Await delivery
		Eurostar	3	Contract signed.
2.	Supply and Delivery of Refuse Compactors	Sinotruck	2	Await delivery
	Compactors	Conplant	3	Await delivery
		Eurostar	5	Order Stage
3.	Supply and Delivery of Front	TBA	3	Re-tendering
	Loading Skip Compactor Trucks			
	complete with Skip Bins			
4.	Supply and delivery of 30ton Hook	Croco Motors	3	At Contract signatures stage
	Loaders c/w Bins			
5.	Supply and Delivery of Skid Steers	Croco Motors	5	At contract signatures stage
6.	Supervisory Vehicles	TBA	10	Tender Stage
7.	Pilot Transfer Stations	СоН	1	At construction stage at Kelvin Depot
		CoH	1	Will commence construction at Glen
				Norah once Kelvin Depot is complete

5.1.6 Finance Issues

(a) Debit Card

The set bureaucracy for a single purchase is exhausting and frustrates agility. There is need to improve on timeous utilization of the same.

5.1.7 Structural Issues

• Establishment of a resident Accountant and Procurement Officers in the Amenities Division structure with set thresholds.

 Review of the Amenities Division structure and alignment to the new model. In the interim conclusion of outstanding job evaluations and filling of vacancies to be expedited.

5.2. Measures that have been Undertaken to Date by the City

The measures that have been undertaken to date by the City are as follows: -

- The City introduced a Night shift in December 2022 for refuse dumps clearances, door to door collections in the CBD and skip bin emptying.
- Secondment of a resident Procurement Expediter to Amenities Division effective from 01 February 2022 to facilitate on procurement matters
- Operationalized the Debit Card facility in March 2022 for procurement of minor items to improve repairs turnaround times,
- Initiated procurement of various waste management equipment under Devolution Funds with the same on different stages of procurement as highlighted in table 8 above.

5.3. WAY FORWARD

5.3.1 Immediate to short term Measures

The table 3 below shows the available and minimum key equipment requirement for sustainable operations.

Table 3 – Key Vehicles, Plant and Equipment Requirements table	Table 3 – Key	Vehicles,	Plant and I	Equipment	Requirements tab
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Equipment	Average Availability	Daily Minimum Required	Remarks
Refuse Compactors	16	40	35 for daily deployments
			5 for Ops and Maint buffer
Skip Trucks	2	10	9 for daily deployments
			1 for Ops and Maint buffer
Front End Loader	3	2	Repairs & Maintenance required
Tipper Trucks	6	20	Due to number of dumps to be
			cleared/
Skid Steers	1	4	5 under procurement
Hook Loaders c/w Bins	0	3	3 under procurement
Refuse skip compactors	0	3	Re-tendering stage
c/w bins			
Supervisory Vehicles	3	10	To be tendered
Push Carts	35	150	Repairs and replacement required

- The current state of refuse dumps in the City is a breeding ground of a plethora of diseases that are associated with Solid Waste, which have been ignored and are a potential source for diseases. In order to avert a health crisis it is crucial that the City Hires Plant and Equipment for Refuse Dumps.
- Once the Refuse Dumps are removed it is fundamental that there is sustainability in terms of curtailing the resurfacing of refuse dumps through the introduction of Community Based Refuse Collection to compliment the current available Fleet to a total of 8 to 10 High Density Areas coupled to

- Robust engagement and awareness of stakeholders
- It is highly recommended that a concerted and holistic approach be implemented to
 ensure that there is adherence to the repair and maintenance schedule for the current
 Vehicles, Plant and Equipment for the Amenities Division.
- It is important to note that that the Plant and Equipment for the Amenities Division is inadequate. It is therefore paramount that vigorous measures are taken through the Inter-Government Funds Transfer (IGFT) system particularly with regards to the procurement of the equipment
- Systems audit of the operations and governance of the Amenities Division is definitely required if at all the City is to become a Sunshine City once again.

5.3.2 Medium-to-Long Term Measures (Waste Management Model Change)

The following measures are therefore recommended: -

(a) Waste Management Model

Changing of Waste Management Model from current LINEAR to CIRCULAR (ISWM) Model as summarized in the Table 4 below.

Table 4 Summary Steps of Model change

Activity/Programme	Action	Timeline
Implementation of the adopted Integrated Solid Waste Management Plan (ISWMP).	A/DoW A/TC	Q1 2022
Construction of a dedicated Automotive Workshop at Amenities Depot	A/DoW A/FD/SCM	Q1 2024
Setting up of a pilot Waste Transfer Station (Kelvin Depot & Zvimba Road, Glen Norah)	A/FD A/DoW	Q2 2023
Capitalization of Division through procurement of vehicles, plant and equipment compatible with new Model ISWMS (skid steers, compacting skip trucks, waste long haul trucks, etc.)	A/DoW A/FD/SCM	Q3 2023

The following are the envisaged benefits of ISWMP to the City of Harare: -

- (a) The proposed model will bring with it reduced hauling costs as fuel consumption is expected to be reduced.
- (b) Skip bin management will be improved through procurement of skip compactors and spillages will be contained.
- (c) A significant reduction in travelling time of a compactor from an area to Pomona disposal site due to reduction in travelling distance. This will increase operational time for collections.
- (d) The increase in number of cycles per day from 2 to 3 or more will lead to improved collection efficiency. There is going to be consequent reduction in occurrence of illegal dumps.
- (e) Reduced fleet operational and maintenance costs as there will be less wear and tear of waste collection vehicles.

(f) The detailed analysis of the concepts being developed will require pilot projects to be implemented.

6 CONCLUSION

I therefore recommend as in paragraph 4 above.

ENG. N. KARIDZ

ACTING DIRECTOR OF WORKS

7/2/2023 DATE

G. KUSANGAYA

ACTING DIRECTOR OF FINANCE

ENG. P. M. MOYO

ACTING TOWN CLERK

KM/LC

DATE

DATE