

SOLID WASTE MANAGEMENT

City of Windhoek December 2019

Solid Waste Management (SWM)

- SWM division falls under Department of Infrastructure, Water and Waste Management
- SWM division was established in 1998
- The initial focus then was mainly on the cleaning of Open Spaces, Street Sweeping and Household Refuse Removal.
- Since the establishment of the division the functions has increased to include the following:
 - > Landfill sites and Technical Support
 - > Licensing, Education, Research & Special Projects
 - > Operation
 - Finance & Administration

It is the largest division in the organization

Solid Waste Management Division Vision

To be a world class solid waste management service provider to our people and become the Cleanest City in the World by 2030 Mission

To render effective and efficient solid waste management services to all our customer to the very best of our ability

Core Purpose

To manage all solid waste generated in the City of Windhoek

SWM Components

Operations

Opens Space and Street Cleansing
 Household and Business Refuse Removal
 Fleet management

Landfill Sites & Technical Support
 Planning and development of disposal facilities
 Management of disposal facilities
 Technical support to other sections

SWM Components (Cont...)

Education and Marketing Educational Institutions Community ■ IEC Material Development Finance & Administration Billing and Income management Budget control & Procurement Asset management & Administration

SWM Components (Cont...)

Licensing & Special Projects

- Research of new and existing systems
- Licensing and Registration of Industry
- Waste Information System (WIS)
- Integrated Waste Management planning

Resources

Human Resources

- 219 permanent positions (85% filled)
- Fix term employees 690 employees

Infrastructure

Fleet size of 92 vehicles with an estimated replacement value of N\$ 89,7 Million (±US 14.65 mil)

■ 1 x Office facilities (Northern industrial area)

Disposal Facilities

Landfill: 1

- Satellite Sites: 7
- Transfer station: 2
- HCRW Treatment Facility: 1

Resources

Distributed Containers

- > 240-litre Wheelie-Bins
- Skip Containers
 - > Pole Refuse and Street Bins

52,000 376 822

Monthly Waste Statistics

General Waste
Hazardous Waste
Building rubble
Garden refuse
HCRW (medical)
E-Waste

7500 tons 650 tons 12 500 m3 7500 m3 700 tons

Waste Containers



Household refuse removal

- Removal once per week according to waste removal calendar
- Removal Mo-Fri including public holidays
- Approximately 50 000 containers per week



Recycling at household level



Statistics of Clear bag system (Sept 2010 to date)

Recyclable items: paper, glass, plastic, cans

Ave. bags per month -16520 Ave. tons per month -65 tons

Benefits:

Job creation (70 jobs MRF)
Reduction of waste to landfill
Implementation of Waste Management Hierarchy

Operational systems

- Household Refuse Removal
 - Removal once per week
 - Formal system- 240 L Wheelie bins
 - Informal System- Black bags issued and collected twice weekly
 - Removal by the City (Except flats, complexes, town houses)
- Business Refuse Removal
 - Waste contained in 240 L Wheelie bins
 - Removal as per request and Client needs
 - Removal by the City / Private Waste transporters

Ward Contractor system

2006/02/09_



Communal recycling stations



Material Recovery Facility (MRF)











Kupferberg landfill site



Landfill site Operations



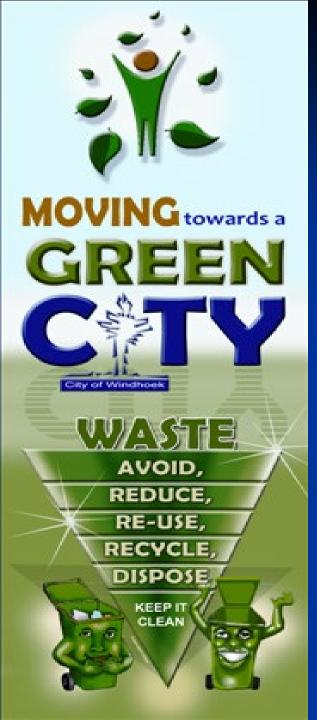
Other disposal facilities





SWM Coverage

- Formal sector is covered 100%
- Collection rate is 100%
- Informal sector coverage is poor and collection rate is 30%
- Recycling in the city is around 5%



Thank you for your attention