

RESPONSIBLE WASTE MANAGEMENT

GREEN BUSINESS FORUM

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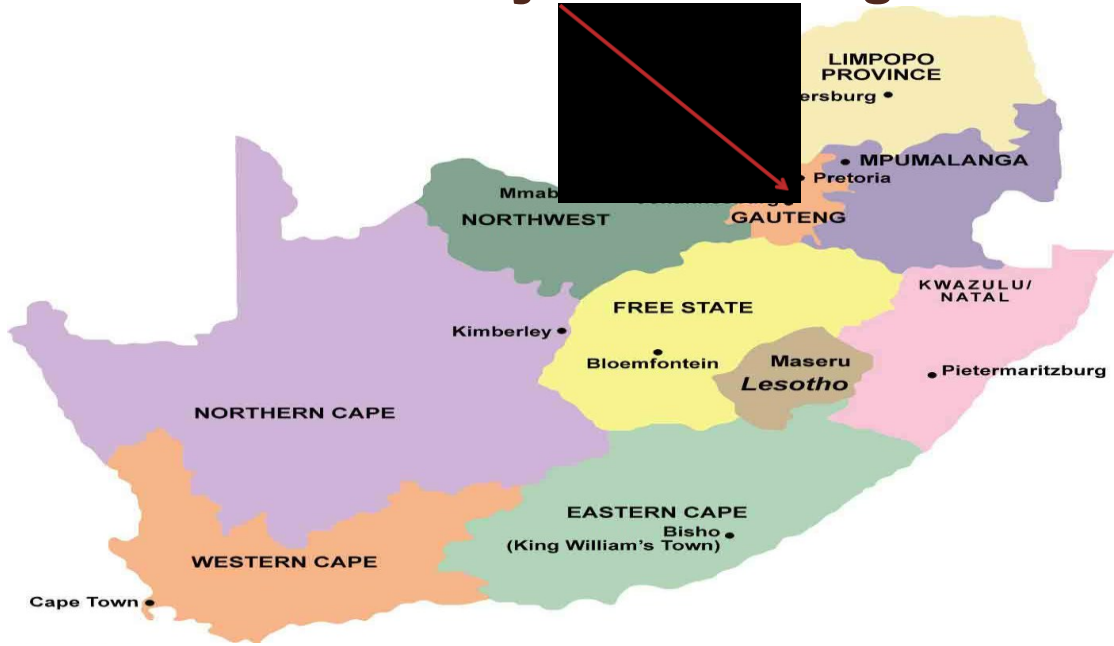


Presentation overview

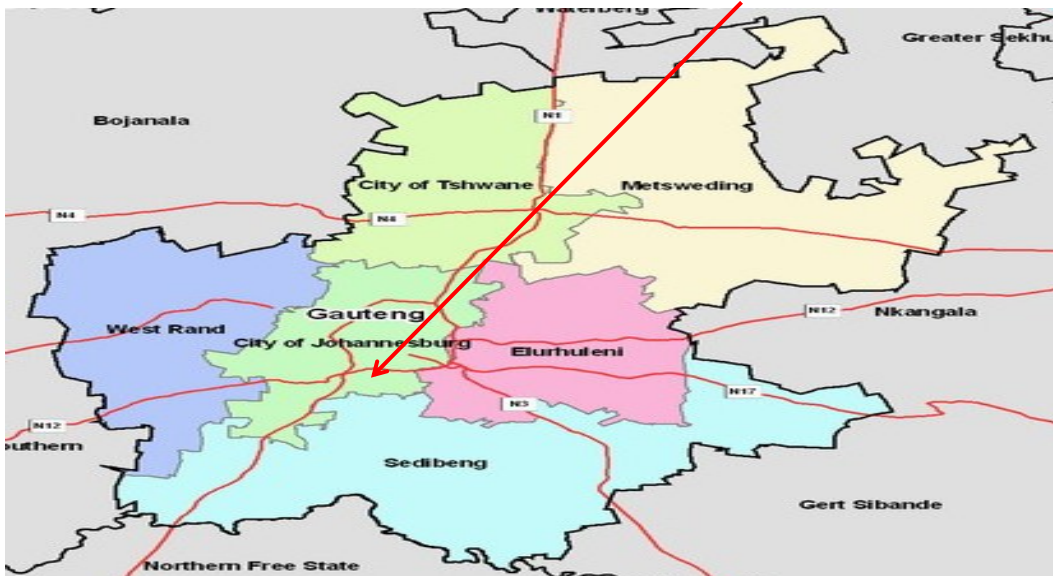
- **Gauteng : Situational Analysis**
 - **Population & Economic factors**
 - **Waste Management Practice**
- **Enabling Waste Legislation**
 - **Some Important points in Environmental and Waste Legislation**
 - **National Environmental Management Act (NEMA)**
 - **National Environmental Management : Waste Act (Act 58 of 2009) “Waste Act”**
- **Gauteng Waste Management and Waste Minimisation strategies – objectives and targets**
- **Responsible waste management for business, monitoring and reporting compliance.**



Situational analysis – Gauteng



Gauteng Municipalities – Johannesburg



Situational analysis – Gauteng

- **Gauteng is the economic hub of South Africa**
- **Experience in-migration: mainly for economic reasons**
- **The relative affluence has attendant high levels waste generation**
- **Most general waste ends up in the municipal landfill sites**
- **40 operational landfill sites in Gauteng – CoJ landfill sites are the most under pressure < 10 yrs lifespan**



Situational analysis – Gauteng

- **Increasing business opportunity for recycling for**
- **Pilot projects on waste separation from home – Source Separation Projects**
- **Waste to Energy Projects - using energy from landfills**
- **Waste to energy projects – fuelling of cars Taxis from methane from landfills**
- **Number of waste co-operatives and intrepeneurs**
- **Increased prosecutions for waste related activities**



Situational analysis – Gauteng

- High levels of waste generation presents various challenges e.g. competing land-uses
 - landfill air space constraints,
 - high waste transportation costs
 - air quality problems such methane gas emissions,
 - illegal dumping and
 - litter
- The province, as well as national government considers waste as a resource **“waste is money”**
- The waste sector as a potential significant contributor in job creation
- **Companies that deal responsibly with waste enhance their image**



Situational analysis – Gauteng stats

Population (2010) Mid Year Estimates	11.2 Million people
% National Population	22.4 %
Contribution to National GDP	33%
% National Waste contribution (CSIR, 2003)	42%
Estimated General Waste to landfill (GDARD , 2008)	5.75 Million tons
Reported General Waste to Gauteng Landfills (Jan 2011 – Dec 2011) Gauteng Waste Information System	7.49 Million tons



Situational analysis - Laws

- The Constitution of SA for Environmental Protection
- The National Environmental Management Act (NEMA) – for Environmental Impact Assessments
- The National Environmental Management: Waste Act, “**Waste Act**” came into effect in July 2009 - Regulating Waste Activities
- Gauteng Waste Plans and Standards approved for implementation:

Gauteng Clean and Green Plan, Sept 2009
General Waste Minimisation Plan, Aug 2010
Hazardous Waste Management Plan, Aug 2010
General Waste Collection Standards, Nov 2010



Responsibilities of 3 Government Spheres with regard to Waste Management

1. National: Department of Environmental Affairs (DEA)
Develop National Waste Strategy, Policy, Standards
Develop National Waste Legislations
Issue Hazardous Waste Management Licences
2. Provincial: Department of Agriculture and Rural Development
Develop Provincial Policies and Standards
Issue General Waste Management Licences
Monitor landfill site operations
3. Municipalities e.g City of Johannesburg
Solid Waste Collection and disposal
Street Cleansing
Municipal Bylaw enforcement



Situational analysis – Law

Section 24 of the Constitution of South Africa

“ Everyone has the right –

(a) to an environment that is **not harmful** to their **health or well-being**; and

(b) to have the **environment protected**, for the benefit of present and future generations, through reasonable legislative and other measures that –

(i) **prevent pollution and ecological degradation**;

(ii) **promote conservation** and;

(iii) ... **sustainable development and use of natural resources while promoting justifiable economic and social development.**”



Situational analysis – Law

National Environmental Management Act (NEMA)

“Cradle to Grave” Principle

Section 4 (e) states : “Responsibility for the environmental health and safety consequences of a policy, programme, project, product, process, service or activity exists throughout its life cycle.”

Ensure that ...

(ii) that **pollution** and degradation of the environment are avoided, or, where they cannot be altogether **avoided**, are **minimised** and **remedied**;

(iv) that waste is **avoided**, or **where it cannot be altogether avoided**, **minimised** and **reused or recycled** where possible and otherwise **disposed of in a responsible manner**”;



Situational analysis – Law - NEMA

Duty of care Principle and remediation of environmental damage

Section 28 “(1) *Every person who causes, has caused or may cause significant pollution or degradation of the environment must take reasonable measures to prevent such pollution or degradation from occurring, continuing or recurring, or, in so far as such harm to the environment is authorised by law or cannot reasonably be avoided or stopped, to minimise and rectify such pollution or degradation of the environment.*



Situational analysis – Law NEMA cont..

(2) Without limiting the generality of the duty in subsection (1), the persons on whom subsection (1) imposes an obligation to take reasonable measures, include an owner of land or premises, a person in control of land or premises or a person who has a right to use the land or premises on which or in which -

- (a) any activity or process is or was performed or undertaken; or
- (b) any other situation exists,

which causes, has caused or is likely to cause significant pollution or degradation of the environment.”



Implementation of Gauteng Waste Management Plans and Standards

Background

The Gauteng waste management plans were developed between 2007 and 2010

They were approved in August 2010 and launched in September 2011

Bilateral sessions have taken place with municipalities for implementation

Copies were provided in DVD in the 2011 and February 2012 Waste Forum Meetings

GDARD has started to monitor the implementation of the plans



Gauteng General Waste Minimisation Plan cont....

Action Plan	Responsible Organisation(s)	Term
Industries to Prepare and submit Waste Minimisation Plans to GDARD for approval	GDARD & Industry	Short 2010-11
Establish PPP manufacturing and development hubs for waste minimisation	GDARD & Industry	Long 2016-19
Industry to prepare supply chain awareness programmes on waste minimisation	GDARD & Industry	Short 2010-11
Establish waste minimisation clubs to foster information exchange between companies	GDARD & Industry	Short 2010-11
Establish a Waste Exchange Database to facilitate waste exchange between businesses	GDARD & Industry	Short 2010-11



Gauteng General Waste Minimisation Plan cont....

Action Plan	Responsible Organisation(s)	Term
Prepare a plan for site collection points (such as bottle banks) at a variety of points throughout the province	Industry	Medium 2011-15
Develop waste minimisation techniques, such as custom designed waste bin that separates in the same bin	Industry	Long 2016-19
Introduce weighbridges as a matter of urgency	Industry & Local Authorities	Short 2010-11
Establish waste recycling centres	Industry & Local Authorities	Long 2016-19
Integrate CDM techniques with waste minimisation	GDARD & Industry	Short 2010-11
Integrate EPR techniques with waste minimisation	GDARD & Industry	Short 2010-11



Gauteng General Waste Minimisation Plan cont....

Action Plan	Responsible Organisation(s)	Term
Prepare motivation plans to recover / recycle significant waste streams (e.g. non returnable beer bottles)	Industry	Long 2016-19
Develop (i) Landfill Pickers Management System and (ii) train pickers with respect to health and safety	GDARD & Local Authority	Short 2010-11



Gauteng General Waste Collection Standards

Objectives

- To enable uniformity and equitable waste management service
- To provide the minimum standards by which any service provider engaged in waste collection must comply
- To ensure a consistent level of cleanliness that is environmentally and socially acceptable;
- To facilitate separation at source for the continuing reduction of waste disposed to landfill; and
- To uphold the principles of waste management hierarchy for general waste namely –



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Reduce, Reuse, Recycle, Treat and Disposal as the last option

Gauteng General Waste Collection Standards cont...

The GWCS include provisions for:

- Colour coded containers be used for waste collection, blue being the approved as standard colour, for recyclable material.
- Photographic Cleanliness Standards.
- **The collection of recyclable materials be at least once a week from every household as part of the door-to-door routine collection service.**
- Storage requirements to prevent pollution and control nuisance.
- Complaints management system to ensure adequate and acceptable response to waste management issues.



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Midrand High School- Midrand



- (Level 1: Ideal cleanliness for Gauteng)
- As above

Gauteng Hazardous Waste Management Plan

Objectives

- Investigation of current national and international trends in hazardous waste management planning
- Identify problems, needs and key issues associated with hazardous waste management
- Collect data on major waste generators and waste streams as well as treatment / disposal options currently used
- Identification of priority hazardous waste streams
- Compilation of a situation analysis and needs assessment report that captured the Gauteng status quo with respect to hazardous waste generation and management

Gauteng Hazardous Waste Management Plan cont....

Action Plan	Responsible Organisation(s)	Term
Communication and information dissemination regarding hazardous waste. (2)	GDARD and Industry	Jan 2012
Policy guidelines and specific substances for waste exchange. (6)	GDARD, Industry, Industry Associations	2013
Conditions of environmental authorisations through IDM Directorate, for cleaner technologies. (7)	GDARD, Industry, Cleaner Production Institute	2013
Norms and standards and policy guidelines on contaminated land and waste storage	GDARD, Industry, DWA, DEA, DME, DoE, Provincial Environmental Departments	2012



Gauteng Health Care Waste Management Regulations

- HCW poses environmental and health risks to the staff of health care facilities, patients and visitors and workers dealing with its management and it therefore require special efforts by the people involved to ensure responsible management.
- The Health Care sector generates growing amounts of Health Care Waste, both Infectious and Non infectious
- The Gauteng Department of Agriculture and Rural Development (GDARD) has embarked on a programme to improve the standard of Health Care Waste Management.
- To address proper handling of HCW by generators, transporters, transfer facilities and treatment facilities, the Gauteng Health Care Waste Management Regulations were developed
- It is also a major generator's responsibility to minimise the volume of health care where practicable.
- A generator must ensure safety at all times when packaging and transporting health care waste internally.



Gauteng Health Care Waste Management Regulations cont..

- The Department can reject the HCWMP if it does not include all the aspects set out in item 3 of schedule 7 in the regulations.
- If the Department rejects the plan, the relevant major generator must amend the plan and resubmit it within 30 days from the date of receipt of the notice.
- A major generator must submit an audit report two years after the approval of the HCWMP to the Department for approval.
- An audit report must be submitted prior to the end of every 2 (two) years thereafter.
- Audit report may be compiled by either an internal or external auditor.
- An audit report must include as a minimum the matters set out in item 4 of schedule 7 in the Regulations.
- If the Department rejects the audit report, the relevant major generator must amend and resubmit it within 30 (thirty) days from the date of signature of the notice.



Gauteng Waste Information System Regulation

- The Gauteng Department of Agriculture and Rural Development (GDARD) develop and promulgate the Gauteng Waste Information Regulations in 2004.
- The promulgation of the Gauteng Waste information Regulations lead to the development of the Gauteng Waste Information System (GWIS).
- GWIS is a system used by government and industry to capture routine data on the tonnages of waste generated, recycled, transported and disposed of in South Africa on a monthly and annual basis.
- The Department is currently in the process of amending the Regulations:
 - to align the regulations with DEA regulations
 - to ensure the system in aligned with the National system
- Companies to report on WIS are generators, transporters, waste disposal site operator, treatment facility, waste transfer facility, waste recycler/ reprocessor



Initiatives to partner with business

Quarterly Waste Forum Meetings

- Capacity Building joint projects with
 - Industry
 - Municipalities
 - Waste Entrepreneurs /NGO / Co-ops
- Engagements with Institute of Waste Management Southern Africa (IWMSA)



Managing waste from your business

1. Know the law

Waste Act (see Chapter 4 of the Waste Act Booklet on Waste Management Measures)

Compliance and Enforcement (Chapter 7 of the Waste Act Booklet)

Know Local bylaws

- Separate different types of waste
paper, plastic, glass cans etc

- Quantify the waste coming from your company
(What you measure you can manage)

How much of waste is coming from your business?

Who is taking it ? Whereto

How can you modify your process to avoid the waste being



Managing waste from your business

- . Find out how much your waste disposal costs you
- . Find out if your waste service provider is legitimate
- . Reuse waste - Find out if there is someone who can use
- . Find out which landfill site it goes to
- . These are only 5 legal landfill sites in the CoJ
**Ennerdale, Goudkoppies Marie-Louise Robinson Deep
FG dumpsite**



Monitoring of implementation of Gauteng Waste Management Plans

Conclusion

Gauteng has developed plans and standards to minimise waste going to landfills whilst also improving environmental performance

Promotion of recycling high on the agenda Creation of partnerships between government and the private sector is encouraged

Business that deals with waste legally and professionally are winners in the current Green Economy Agenda

Waste is a resource and it is money do not throw it away.

**Do not take Short Cuts with Waste Disposal - Remember :
Goed Koop is Duur Koop !**



THANK YOU

