



**DEPARTMENT OF ENVIRONMENTAL  
AFFAIRS AND TOURISM**

**DANIDA**



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**Report Number:  
DEAT Report Number: 12/9/6**

**NATIONAL WASTE MANAGEMENT  
STRATEGY IMPLEMENTATION  
SOUTH AFRICA**

**WIS NEEDS ANALYSIS**

**FREE STATE PROVINCIAL WASTE  
INFORMATION SYSTEM WORKSHOP  
18 JANUARY 2005**

**DRAFT REPORT**

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Ref.No	104.Sydafrika.1.MFS.57-1		
Report.No.		Prepd.	LG, OB
Edition	Draft	Checked	OB
Date	2005-01-24	Appd.	

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## **1 Workshop opening, welcome and introduction**

Mr Mathebula, Chief Director: Environmental Conservation for the Free State and Acting Head of Department for the Free State Department of Tourism, Environmental and Economic Affairs (DTEEA) welcomed everyone to the workshop. Mr Mathebula highlighted that Government has an obligation in terms of Section 24 to ensure a safe environment for all. The development of a WIS is seen as an important part of the NWMS and a key cornerstone giving direction as to how waste should be managed. He stressed that we should also not separate the WIS from the Polokwane Declaration, since the WIS is the step towards reaching the objectives of the Declaration, by providing both the status quo as well as the direction. Mr Mathebula pointed out that there should be a link between the Air Quality Bill and the WIS to ensure a mass balance of what goes in and what comes out of e.g. industry.

Mr Mathebula highlighted that the Free State is a farming area, and as such the WIS should support the protection of farm products and human health and create jobs. He welcome the WIS as a mechanism to create change as to how waste is managed.

## **2 Purpose of the Workshop**

Ms Godfrey outlined the purpose of the workshop as being:

- For the Free State Department of Tourism, Environmental and Economic Affairs (DTEEA) to share with National Government their needs with regards to a provincial and national WIS and any future plans regarding the a provincial WIS;
- For National Department of Environmental Affairs and Tourism to share with representatives from Province and Local Government, the objectives of the National Waste Management Strategy Implementation Project, and in particular the objectives, outputs and activities of the national waste information system;
- To identify the needs with respect to waste information and information systems by Local and Provincial Government;
- Through information sharing, to build capacity within the Local, Provincial and National Government around waste information systems.

## **3 Presentations**

### **3.1 Free State Provincial WIS – plans and progress**

Ms Nomazizi Mdi, Director Environmental Affairs, made a presentation on the WIS as an enabling tool to the development of Integrated Waste Management Plans (IWMP) by local and provincial government.

- Establishment of waste quantities and characteristics is the first step in developing IWMP
- Waste is categorised by source (domestic, commercial, industrial)
- WIS quantities
  - Waste generated, collected, recycled, treated and disposed of, estimation through:
    - Landfill volume,

- generation rates for specific waste types
- Geographic waste management areas and routes should be mapped which identifies need for recycling

Provincial responsibilities are seen as:

- Ensure data is collected at Local Government level. Province does not have the capacity to visit all industries and collect data.
- Mass balancing – wrt industries – map raw materials, products, waste streams (incl. emissions, effluents, etc.)
- Aggregate and verifying data from local government and industries
- Link WIS with authorizations
- Report to DEAT for national dissemination

WIS for municipalities has been initiated, with a pilot project in Mathjabeng.

The Free State Department would like to have a GIS mapping component indicating landfill sites, generation areas.

It is recognised that not all landfills in the Free State have weigh bridges.

### **3.2 NWMSI WIS Overview**

Ms Linda Godfrey, Local Support Consultant to the DEAT gave an overview of the National Waste Management Strategy Implementation (NWMSI) Project, in particular addressing the national context, the NWMSI project outputs and activities, the project deliverables and the way forward in terms of development and implementation.

### **3.3 NWMSI WIS Framework**

Mr Obed Baloyi, Deputy Director: WIS from the Department of Environmental Affairs and Tourism gave an overview as to the current thinking with regards to the framework of the national waste information system, i.e. the system concepts, information providers, reporting obligations and the roles and responsibilities.

Mr Boloyi stressed that a phased implementation is planned, such that not all needs may be met in the short to medium-term. DEAT will provide, as part of the project, the minimum software required by local and provincial government, however, DEAT will not be prescriptive should local or provincial authorities wish to develop their own systems, so long as these systems can provide the information required by national DEAT. He outlined that the first step in the development of the WIS, was to determine the needs of Local and Provincial Authorities, to ensure that the national WIS took cognisance of these needs in the development of the WIS Framework Document.

The DEAT presentations used are available for further review on the project web site, at [www.nwmsi.co.za](http://www.nwmsi.co.za)

## 4 Needs Analysis

In order to determine the specific waste information and information system requirements of those stakeholders represented at the workshop, the Participatory Planning<sup>TM</sup> process was utilised. Questions were posed to the audience and delegates were requested to provide a short written responses to each question.

The following four questions were posed to the audience:

- Why do we need a Waste Information System ?
- Why don't we already have a Waste Information System in place ?
- If we fulfill all of these requirements will we be able to implement a Waste Information System ?
- What data should a Waste Information System collect ?

Two new questions were added at this workshop, to ascertain any specific reporting requirements or obligations which Province or Local Government might have and which the WIS can support, and any supporting tools<sup>(1)</sup> which might provide the information which local and provincial government might require.

- What are your (local/provincial) specific reporting requirements ?
- Are there specific tools which would be useful to local and provincial government to support planning etc.

Each of these questions is dealt with in more detail below and the responses received detailed in Annexure A.

### 4.1 Why do we need a WIS

The main responses received as to why a WIS is required were the following:

- Gather data on waste
- To monitoring waste/trends
- To support public access to information / awareness
- To aid control and enforcement
- To aid decision-making
- To facilitate waste management planning
- Budgeting / Cost recovery
- To gauge success of policy implementation
- Waste Management
- Job Creation
- Capacity building

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<sup>1</sup> Examples of tools might be a spreadsheet which converts quantity of waste received at landfill to remaining airspace, listing of price of recyclables etc.

## **4.2 What is standing in the way of a successful WIS ?**

The main responses received as to what may stand in the way of a successful Free State or LA WIS were:

- Lack of information and/or accuracy of information
- Lack of political & managerial support
- Lack of capacity (human, finance, IT)
- Uncertain regarding responsibilities
- Lack of awareness of WIS
- Lack of priority
- Not seen as a function
- Uncertain of benefits offered by WIS

## **4.3 If we fulfil all of these requirements will we be able to implement a WIS?**

It was agreed by all present, that if we can address all of the above aspects, it is feasible that a sustainable national waste information system can be implemented in South Africa. The question raised though is whether the WIS, once developed, will be successful in terms of it's original objectives.

## **5 Discussion Session**

Following the presentation and planning session, the workshop was opened for general discussion and questions. The details of the discussions cannot be summarised here, however, the basis of the discussions focussed on the value of a waste information system in the province and the low or lack of priority given to waste management at local government.

Some of the questions are listed below:

- Training must be down to the lowest level of municipality as they don't have training in waste and figures are just thumb sucks. Therefore WIS must be very simple and include training.
- Is it safe for everyone to have different systems and for DEAT to state that provinces can have their own system ?
- Does local/province have capacity to verify information ?

**ANNEXURE A  
PARTICI-PLANNING**

## **Question A: Why do we need a waste information system ?**

### **A1 Gather data on waste**

- To capture waste data into one place (from local to national)
- Have a database of amounts and categories of waste that is generated in the province
- So that local authorities could have accurate data on the tonnage of waste collected
- Know the volume of recyclables and non-recyclables
- To centralise all waste info to determine our waste generation
- To know the data on all waste generators, transporters and disposal facilities
- To know the quantities and types of waste that we need to deal with in order to protect the environment and the health of the people
- To determine the different waste that enters the landfill site, for example recycling purposes
- To be able to have more definite information available
- So that we can know as to how much waste is produced in SA annually
- Know generators, transporters, treatment plants etc

### **A2 To monitoring waste/trends**

- Assist in monitoring of waste and control

### **A3 To support public access to information / awareness**

- For the community to know what type of waste / pollutants are released into their environment
- To ensure that various stakeholders including international have a picture of what is taking place regarding the environment.
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### **A4 To aid control and enforcement**

- To generate info on legality of existing disposal sites and methods
- Ensure that there is adherence to principles, legislation, policies etc.
- To ensure that waste disposal is dealt with according to national and international requirements
- That adherence is given to the environmental needs of the community, to live in a clean and safe environment
- For use of legal compliance evaluation
- To ensure proper monitoring of compliance to NEMA regulations by local sphere of government

### **A5 To aid decision-making**

- Facilitate proactive thinking when it comes to issues of waste control and management, because practitioners in this field would be in a better position of analysing, strategising and making decisions.

- To gather info focussed on key problems and possible solutions
- For informed decision making and planning purposes

#### **A6 To facilitate waste management planning**

- To inform/feed in info that will enable the national government to assist/support institutions where there are deviations/problems.
- To do better strategic planning
- To minimise waste and to know exactly how much waste is being generated
- To receive guidance from province and national governments
- In order that there will be a reliable, scientific management tool for purposes of integrated waste management
- The provision of equipment
- To be able to collect data and identify needs
- To avoid the dangers that may face the country if there is no accurate info
- To ensure that government know, evaluate and verify the status of waste (cradle to grave) from local to national.
- Assist us in the size of the landfill that we need and how deep should it be, because at the moment our landfill is not properly managed
- So that we can be able to measure how many households use waste per month/per week
- To have accurate information for future purpose
- To determine the needs for ground for landfill sites
- We need to know how much waste is being produced and what can be done to minimise it
- Then we will be able to know the dangers facing us and start to plan for the eradication of potential hazards
- To ensure that health problems are being addressed in our different communities and also to come up with proper mechanisms of doing away with those hazardous wastes
- To better plan future and current waste operations with regard to recycling and waste minimisation initiatives, collection, transport etc.
- To ensure that there is reliable information on waste to allow for proper planning.
- To determine landfill site lifespan
- To use the information for prioritisation purposes in terms of where recycling initiatives can be implemented, i.e. planning purposes

#### **A7 Budgeting / Cost recovery**

- To do a proper budget
- To enable a better billing system – polluter pays principle
- Determine the amount of money to be spent on awareness campaigns relating to waste control, minimisation and projects.
- Funding mechanisms
- To determine the needs for budget purposes

#### **A8 To gauge success of policy implementation**

- data collect help in indicating achievements of waste minimisation strategies.

## **A9 Waste Management**

- To ensure sustainability in management
- To enable effective management of waste
- In order to be able to manage our landfill sites properly
- To have a link between all spheres of government to control waste
- To be able to successfully manage waste disposal
- To ensure a coordinated information system on waste and pollution in order to assist in managing waste systematically locally.

## **A10 Job Creation**

- Because it will create jobs
- To create jobs and to have a health environment

## **A11 Capacity building**

- To build capacity regarding waste management

**Question B:**  
**What is standing in the way of KZN having a successful WIS ?**

**B1 Lack of information and/or accuracy of information**

- Lack of information
- Lack of relevant information, capacity and resources to develop the WIS
- Data is unable to be verified
- Fragmentation of current data collection

**B2 Lack of political & managerial support**

- lack of commitment and buy in of political and administrative staff in the system

**B3 Lack of capacity (human, finance, IT)**

- Capacity constraint
- Didn't have a waste management unity previously - we are developing one now
- We still have to undergo training from national to ordinary citizens
- We don't have IT
- Don't have the necessary resources
- No money
- Financial constraints
- No budget
- Because of financial constraints
- Financial constraints, lack of capacity
- Human and financial resources constraints
- Lack of capacity (finances, expertise)
- Due to lack of capacity
- Lack of financial resources and in-house capacity
- Lack of expertise and human resources
- Small municipality – no capacity, financial constraints to develop system
- Because of lack of capacity
- Capacity – turnover of personnel
- Lack of capacity and resources – personnel, financial, infrastructure
- Don't have the necessary capacity
- Lack of capacity
- Data is unable to be verified and resources are costly to other government spheres e.g. local and provincial level

**B4 Uncertain regarding responsibilities**

- We need guidance on how to develop one
- Delay from national to give framework

**B5 Lack of awareness of WIS**

- lack of capacity and not aware

**B6 Lack of priority**

- Waste management was never a priority to local government – we only realise the importance of it now – new legislation enable it.
- Waste information was not requested by the local municipality as per unit (tours) in the past: only information requested was how many households/businesses were serviced
- Attitudes should change more to make WIS a priority function
- It is not in place because planning is still in progress. Workshops are still conducted
- Unable to know the importance of waste management
- IWMP not finalised
- Waste not a priority to municipalities

**B7 Not seen as a function**

- Local authorities in the past only focussed on practical refuse collection and disposal, and not on generating info
- At local government, the issue of development of IWMP was not a requirement, but for district municipalities. WIS is an integral part/element of IMWP, therefore WIS has been overlooked
- Local authorities do not have trained personnel managing their waste department. Still only focussing on service delivery

**B8 Uncertain of benefits offered by WIS**

- Currently do not see benefits of the WIS
- Benefits at certain levels of community. If there are benefits, politicians will support/finance. If not, they will just deal with it as another admin burden

**Question D:  
What data should a Waste Information System collect?**

*Entity specific*

- Permit status
- Compliance with permit conditions
- Equipment
- Availability of skilled/trained supervision/manpower on-site
- Entrance control

*Waste specific*

- tonnage refuse received at site
- tonnage leaving site for recycled
- tonnage recycled
- tonnage non recyclables
- waste received from private companies/industries/individuals
- number of illegal dumping sites
- number of households, business serviced
- method of disposal of medical waste
- complaints
- availability of coverage material
- remaining airspace at landfill site
- water monitoring
- types of waste
- availability of wet cell in landfill

**Question E:**  
**What are your (local/provincial) specific reporting requirements?**

- Amount of refuse generated per year – to province – adhoc
- Section 20 permit condition reporting for landfills – to DWAF – enforced
  - Surface or groundwater pollution – to DWAF by permit holder
- Access to effective waste collection services (status quo in districts, access to services, collection e.g. % households with access to collection, if not why not, status of equipment to render the proper service) – to council/politician – quarterly and monthly reports at district municipality levels –
  - Rural
  - Urban
- Environmental implementation plans – CEC annually, premiers office quarterly – Chapter 3 of NEMA
- IDP review by local and district – annually to MEC – Municipal Systems Act
- Municipal systems act – annual report on performance (Chapter 6?) – local government and housing (provincial department, national treasury)
- Municipal systems act - Community based planning – report by council to community on status quo, services etc.
- Section 21, 22, 24, 26 of ECA – to DEAT – records of decision which were issued
- Agenda 21 reporting obligations
- Section 31 of NEMA on emergencies – DEAT
- Requests and approval for recycling projects on landfills – requested by council from local authorities (should be part of IDP process, ideally, or if adhoc request, may have to be submitted to council for approval)

**Question F:**  
**Are there specific tools which would be useful to local and provincial government?**

- Estimation of quantities from estimated volumes – e.g. number of loads or m<sup>3</sup> to kg.
  - Andre van Zyl (contact)
- Estimated of remaining airspace of landfill based on quantities of waste being disposed of
- Based on generation rate per area, how many vehicles would be required to optimally service region.
- Estimate costs on actual costs vs outsourcing

**ANNEXURE B  
DELEGATE LIST**

**FREE STATE PROVINCE  
WORKSHOP DELEGATE LIST**

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