NATIONAL WASTE MANAGEMENT STRATEGY IMPLEMENTATION SOUTH AFRICA

WIS NEEDS ANALYSIS

MPUMALANGA PROVINCIAL WASTE INFORMATION SYSTEM WORKSHOP 5 OCTOBER 2004

FINAL REPORT

NATIONAL WASTE MANAGEMENT STRATEGY IMPLEMENTATION SOUTH AFRICA

WIS NEEDS ANALYSIS

MPUMALANGA PROVINCIAL WASTE INFORMATION SYSTEM WORKSHOPS 5 OCTOBER 2004

FINAL REPORT

Ref.No	104.Sydafrika.1.MFS.57-1		
Report.No.		Prepd.	LG, OB
Edition	Draft	Checked	FT
Date	2004-10-06	Appd.	

TABLE OF CONTENTS

ANNEXURE A   Partici-planning outputs
ANNEXURE B   Workshop delegate list

1 Workshop opening, welcome and introduction

Mr Fikile Theledi, Deputy-Director: Pollution & Waste Management welcomed everybody to the workshop and apologised that Mr Maluleka, the Chief Director: Environmental Services could unfortunately not open the workshop since he was called away.

2 Purpose of the Workshop

Mr Theledi outlined the purpose of the workshop as being:

- For the Mpumalanga Department of Agriculture and Land Administration (DALA) to share with Local, Provincial and National Government their intentions around the development of a provincial waste information system in Mpumalanga;
- 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 Mpumalanga Provincial WIS – plans and progress

Mr Fikile Theledi provided an overview of the Mpumalanga PRTR type waste information system:

- Project co-funded by DALA and DBSA over 2004-2007
  - Total programme budget is R6 000 000
  - DBSA contribution = R2 500 000
  - DALA (plus other parties) contribution = R 3 500 000
  - Total budget includes the development of the Mpumalanga Hazardous Waste Management Plan, Municipal Environmental Management Capacity Building Project, Nkangala District Integrated Municipal Environmental Programme, Gert Sibande District Municipality Integrated Waste Management Plan and the Mpumalanga Biodiversity Conservation Plan
  - The estimated cost of the WIS development only is R300 000 (5%)
- Project objectives:
  - Development of a reporting system and decision-making tool to capture data on major sources of pollution across all three environmental media;
  - Focus on principal sources of atmospheric emissions and generators of hazardous waste streams from industrial activities; municipalities and health-care institutions; and

- Gather data to develop an inventory of waste and emission sources and use this inventory to develop a provincial Pollutant Release Register (PRR)/ Pollutant Information System (PIS).
- Process data for use in the development of provincial Hazardous Waste Management Plan and Air Quality Management Plan.

- The system will be Geographical Information System (GIS) based and cover all sources of environmental pollution, focussing on air pollution sources, waste generators, handlers and disposal/treatment facilities. The system is not only about understanding the waste, but having a visual display of where facilities and generators are, to allow for planning, assessment of movement of waste, facility siting and identification of '*hot spots*'
- The system, expected to be completed by the end of March 2005, will be piloted with selected industrial sectors, most probably the pulp and paper, steel processing or refinery/ power generation sectors from March 2005 to March 2006, after which time the software should be fully functional.

Screen captures of the waste information system were also presented to the audience. The following points are of relevance:

- The system is currently network based, with information available for viewing by DALA only. All data is captured by DALA and forwarded to the Provincial IT Department in Ermelo where it is entered into the system by the Administrator. It is the intention to make the system available via the internet at a later stage
- The system is subdivided into the following components or tabs:
  - "*Client Information*" – static information on the company, e.g. Eskom
  - "*Site Information*" – static information on the sites or facilities of this company, e.g. list of permitted landfill sites owned by Eskom, or list of treatment facilities on site.
  - "*Waste Information*" – allows for capturing of regular tonnages of waste
  - "*Reports*" – predefined reports a specific company and site, over a particular period.
  - "*Maps*" – accessible data is made available spatially as predetermined layers.
- The focus of the system is currently on the spatial identification of waste role players i.e. generators, treatment facilities, landfills, rather than the collection of routine waste information, although system is designed to accommodate such information.

3.2   NWMSI WIS Overview

Mr Obed Baloyi, Deputy Director: WIS from the Department of Environmental Affairs and Tourism 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

Ms Linda Godfrey, Local Support Consultant to the DEAT 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.

Ms Godfrey 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.

4 Needs Analysis

In order to determine the specific requirements of those stakeholders represented at the workshop, the Partici-Planning ^{TM} process was utilised. Questions were posed to the audience and delegates were requested to provide 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 ?

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:
- Collect data on waste
- To facilitate planning
- Raise awareness on waste generation

4.2 Why don't we already have a WIS in place ?

The main responses received as to why we don't already have a WIS or a successful were:
- Lack of planning
- Responsibility for development and implementation not taken by local, provincial and national government.
- Lack of resources (capacity, funding)
- Lack of communication between levels of Government and private-public sector

- Lack of legislation at all levels of Government to enforce
- Lack of awareness of the requirements around 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. However, it was stressed that if any one of the points is not adequately addressed it could undermine the entire process of development and implementation.

4.3 If we fulfill all of these requirements will we be able to implement a WIS?

It was agreed by all present that if Government could fulfil points 4.2 a successful waste information system could be implemented at the three tiers of Government.

4.4 What data should a WIS collect ?

The following data was requested for consideration in the development of the WIS Framework:

Waste Information:
- Type of waste - classification
- Volume/mass of waste
- Where is waste generated (sources)
- Who are the waste transporters
- Where are the Treatment facilities
- Who is disposing of the waste
- Where is the waste disposed
- Who is recycling waste
- Not only generators of waste but ID potential risk sources

Entity Information:
- Contact details of generators
- Contact person / responsible person
- Coordinates
- Classification of landfill site
- Disposal options available
- Land requirements (for waste disposal sites), planning
- How often is waste generated/collected/treated/disposed
- Landfill status (permitted ?)
- What type of waste services are rendered
- Is there a weigh bridge
- Mode of transportation
- Landfill management – on-site information, equipment, according to your permit requirements
- What do you do in promoting waste minimisation
- Asset management
- Compliance with operating requirements as set by DWAF
- Finances (cost of operation, IWM)

5   Discussion Session

Following the presentation and planning session, the workshop was opened for general discussion and questions. The details of the discussions can not be summarised here, however, the basis of the discussions focussed on information sharing, lessons learnt and likely expectations from national government as to waste information required from local and provincial government.

Some of the questions are listed below:
- How is Province going to assist Local Authorities in the development of their systems, since Mpumalanga has secured considerable funding for the development of the provincial WIS ?
  - Funding is currently not available by Province for development of WIS for local authorities. Ms Godfrey outlined that the NWMSI Project will provide the minimum software required by local and provincial government for data collection in terms of the national WIS, however local and provincial government are free to develop their own systems, so long as they can provide the data required by DEAT.
- Is the focus of the Mpumalanga WIS on air emissions ?
  - No focus on listed activities
- Will the national WIS be GIS based ?
  - It is unclear at this stage, since the project team is only starting the needs analysis phase of the project
- A pilot system was developed by DEAT in 2000. Will this system be used, or will a completely new system be developed ?
  - It is expected that a completely new system will be developed, since we have slightly different waste information requirements now and various new information technology options are available.
- Who will be required to submit information to the national WIS
  - A conceptual framework is currently available outlining the role-players in terms of waste information reporting, however, the needs analysis currently being conducted with Provinces, will serve as the basis for identifying the role-players and data providers.

ANNEXURE A
PARTICI-PLANNING

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

A1   Collect Data

- Gather & process info on amounts, types & generation rates
- How waste is managed from generators & how it is disposed of
- Focus on the principal sources of emissions & pollution generators
- Where is the waste disposed
- To identify gaps in waste management
- Kinds of landfills in an area
- To know the quantity of waste that is generated
- Don't know type & amount HCW generated
- ID sources of pollution or generators of waste
- To know types of waste generated, collectors, transporters, disposers, facilities

A2   Proper Planning

- Making information readily available for future development
- For financial planning in health care sector
- Help to develop proper plans for waste management
- Develop control measures
- Volumes of waste becomes a problem
- Make decisions on proper management to protect human health and environment
- To know the type of waste generated in the area for better control and management thereof
- To plan for service delivery around waste management
- To be able to plan ahead and have control over our activities (waste-wise)
- Waste disposal sites takes up valuable land (planning)
- For proper handling and management of waste
- To set standards (uniform across local and provincial authority) on waste management
- To be able to rehabilitate mistakes committed in the past
- To make informed decisions – policy making

A3   Raise Awareness

- To raise awareness on the extent waste is generated and the impact thereof.

Question B:
Why don't we already have a Waste Information System in place ?

B1   Lack of Planning

- No proper planning by the different role-players in establishing a WIS – Need a driver
- Poor planning
- Nobody took control to implement a WIS

B2   Responsibility

- Nobody really took responsibility for waste
- Role players not committed
- In the past waste information was not a big issue
- Lack of governance in terms of lead agents, i.e. no clear indication that a particular department is in charge of waste management
- Commitment by senior management and politicians

B3   Lack of Resource (capacity and financial)

- Lack of resources, e.g. funds, human
- Lack on manpower
- Lack of computers
- Capacity constraints – funds, skills, technology
- Unavailability of funds to run the whole programme
- No budget made available to deal with the waste issue
- Lack of regulation and capacity
- Capacity problem
- Lack of capacity to start and manage the process

B4   Lack of Communication

- Fragmentation in government service delivery
- Lack of communication

B5   Lack of Legislation

- No law
- No legislation to get information from generators
- Lack of specific regulatory instruments to mandate system development and reporting

B5   Lack of Awareness

- Lack of environmental awareness amongst decision makers e.g. waste managers

ANNEXURE B
DELEGATE LIST

MPUMALANGA PROVINCE
WORKSHOP DELEGATE LIST

NAME	COMPANY	TELEPHONE	FAX	EMAIL
Fikile Theledi	DALA (Mpumalanga Department of Agriculture and Land Administration)	(013) 766-6063	(013) 766-8445	mtheledi@nelagri1.agric.za
Dudu Maphanga	DALA, P&WM	(013) 759-4051	(013) 759-4028	dmaphanga@drumrock1.agric.za
Gezephi Nyalunga	DALA	(013) 690-1279	(013) 656-5469	ghnyalunga@wit.mpu.gov.za
Gavin Cowden	DALA	(013) 766-6062	(013) 766-8445	GCowden@nel.mpu.gov.za
Sipho Mndebele	DALA, Environmental Education	(017) 883-0983	(017) 883-0985	-
Norma Mdhluli	DALA, Impact Management	(013) 759-4049	(013) 759-4028	nmdhluli@drumrock1.agric.za
Zola Kutsu	DALA	(017) 819-1155	(017) 819-1155	Zola@environ1.agric.za
Obed Baloyi	Department of Environmental Affairs and Tourism (DEAT)	(012) 310-3833	(012) 310-0558	obaloyi@deat.gov.za
Linda Godfrey	DEAT / CSIR	(012) 310-3920	(012) 842-7687	lgodfrey@deat.gov.za
Johann Barnard	Mpumalanga Dept. of Health (Occup. Health)	(013) 766-3446	(013) 766-3469	JohannBa@social.mpu.gov.za
Mbuli M.H	Mpumalanga Department of Health	(013) 755-5100	(013) 755-1681	HerbertM@social.mpu.gov.za
Marius du Toit	Mbombela Local Municipality	(013) 759-2138	(013) 759-2146	mariust@mbombela.gov.za
Seporo Masemola	GSDM	(013) 262-5542	(013) 262-3688	masemolas@sekhukhune.co.za
Jeff Mphafudi	DEDP	(013) 766-4189	(013) 766-4614	-
Morris Mollo	DEDP	(013) 766-4191	(013) 766-4614	-
Dinah Sedibana	LG&H	(013) 766-6441	(013) 766-8442	DSedibana@nel.mpu.gov.za
Pierre van Brakel	EDC	(013) 259-8552	(013) 759-3047	pvanbrakel@ledc.co.za

NAME	COMPANY	TELEPHONE	FAX	EMAIL
LB Mwale	DACEL	(013) 759-4100	(013) 759-4086	-
Rudzani Mudau	DME	(013) 656-1448	(013) 690-3288	rudzani.mudau@dme.gov.za
Prudence Phala	DME	(013) 656-1448	(013) 690-3288	leshidi.phala@dme.gov.za
Khalathi M. Skosana	Steve Tshurete Municipality	(013) 249-7073	(013) 249-7077	kskosana@middelburgsa.co.za
G.V. Rensburg	Steve Tshurete Municipality	(013) 249-7300	(013) 249-7257	-