

*KwaZulu-Natal*  
*Policy*  
*on*  
*Waste Management*

The Draft Policy was drawn up by the KwaZulu-Natal Waste Management Policy Steering Committee and is the culmination of a year-long consultation process within the province conducted in 1997. The multi-stake holder Steering Committee was representative of the following sectors:

Business and Industry, Civil society, Labour, Local Government Departments, Local Government Councils, National Government Departments, NGOs, Provincial Government Departments and the Provincial Legislature.

The policy has been further updated following a 2-day Waste Imbizo held in October 2001.

December 1997

Updated November 2001

Finalized February 2002

# TABLE OF CONTENTS

<b>1</b>	<b>Introduction.....</b>	<b>1</b>
1.1	<i>Definitions of Waste and the Environment.....</i>	<i>1</i>
1.1.1	Waste.....	1
1.1.2	Environment.....	1
1.1.3	Waste Management.....	2
1.2	<i>Scope and purpose of the draft policy.....</i>	<i>2</i>
1.3	<i>Need for draft policy.....</i>	<i>2</i>
1.4	<i>The consultation process.....</i>	<i>2</i>
<b>2</b>	<b>Vision.....</b>	<b>4</b>
<b>3</b>	<b>Principles .....</b>	<b>5</b>
3.1	<i>Alternative Technologies.....</i>	<i>5</i>
3.2	<i>Capacity Building and Education.....</i>	<i>5</i>
3.3	<i>Conception to decomposition.....</i>	<i>5</i>
3.4	<i>Conflict of Interest .....</i>	<i>5</i>
3.5	<i>Coordination.....</i>	<i>5</i>
3.6	<i>Equity.....</i>	<i>5</i>
3.7	<i>Environmental Justice and Participation .....</i>	<i>5</i>
3.8	<i>Full Cost Accounting .....</i>	<i>6</i>
3.9	<i>Cooperation and Responsibilities.....</i>	<i>6</i>
3.10	<i>Inclusivity.....</i>	<i>6</i>
3.11	<i>Integration.....</i>	<i>6</i>
3.12	<i>Open Information.....</i>	<i>6</i>
3.13	<i>Precaution.....</i>	<i>6</i>
3.14	<i>Prevention.....</i>	<i>6</i>
3.15	<i>Polluter Pays.....</i>	<i>6</i>
3.16	<i>Sustainability.....</i>	<i>7</i>
<b>4</b>	<b>Strategic Goals and Objectives .....</b>	<b>8</b>
4.1	<i>Strategic goals .....</i>	<i>8</i>
4.2	<i>Specific goals and objectives .....</i>	<i>8</i>
4.2.1	General Waste .....	8
4.2.2	Hazardous waste .....	9
4.2.3	Recycling .....	9
4.2.4	Health care waste .....	9
4.2.5	Low-level radioactive waste .....	10
4.2.6	Waste from Economic Activity.....	10

4.2.7	Transport, storage and handling of waste .....	11
4.2.8	Effective institutional framework and legislation .....	11
4.2.9	Environmental conflict management .....	11
4.2.10	Sustainable resource use and impact management .....	11
4.2.11	Energy conservation.....	11
4.2.12	Holistic and integrated planning .....	12
4.2.13	Methods of disposal .....	12
4.2.14	Participation and partnerships in waste governance and management .....	12
4.2.15	Environmental Impact Assessments .....	13
4.2.16	Empowerment and waste education.....	13
4.2.17	Information management .....	13
<b>5</b>	<b>Governance.....</b>	<b>14</b>
5.1	<i>Constitutional Setting.....</i>	<i>14</i>
5.1.1	Powers of the provincial sphere of government.....	14
5.1.2	Intergovernmental cooperation .....	14
5.1.3	Accountability and participation .....	14
5.1.4	Environment Conservation Act.....	14
5.1.5	National Environmental Management Act.....	14
5.2	<i>Essential requirements for effective waste governance .....</i>	<i>14</i>
5.3	<i>Allocation of functions .....</i>	<i>15</i>
5.3.1	Accreditation and capacity building.....	15
5.3.2	Achieving integrated and coordinated environmental and waste management .....	15
5.3.3	Environmental Court.....	15
<b>6</b>	<b>Institutional Framework .....</b>	<b>16</b>
6.1	<i>Department of the Environment.....</i>	<i>16</i>
6.2	<i>Lead Agent .....</i>	<i>16</i>
6.2.1	Responsibilities of the lead agent.....	16
6.2.2	Powers of the lead agent .....	18
6.3	<i>Advisory Forums.....</i>	<i>19</i>
6.3.1	Composition.....	20
6.3.2	Responsibilities .....	20
6.3.3	Authority .....	20
6.3.4	Powers.....	20
6.4	<i>Ombudspersons.....</i>	<i>21</i>
6.4.1	Appointment and accountability .....	21
6.4.2	Responsibilities .....	21
6.5	<i>Coordination of Functions .....</i>	<i>21</i>
6.5.1	Delegation .....	21
6.5.2	Capacity building .....	22
<b>7</b>	<b>Regulatory Mechanisms .....</b>	<b>23</b>
7.1	<i>Command &amp; Control (direct measures).....</i>	<i>23</i>
7.1.1	Legislation.....	23
7.1.2	Waste reduction standards and targets .....	23
7.1.3	Administration .....	23
7.2	<i>Voluntary Agreements (indirect measures).....</i>	<i>24</i>
7.2.1	Minimum standards.....	24

7.2.2	Information .....	24
7.2.3	Alternatives and options.....	24
7.3	<i>Economic Instruments</i> .....	24
7.3.1	Costing .....	24
7.3.2	Legislation.....	24
7.3.3	Thresholds and standards .....	25
7.3.4	Applicability .....	25
7.4	<i>Fidelity Trust Fund</i> .....	25
7.4.1	Process .....	25
7.4.2	Status .....	25
7.4.3	Governance and administration .....	25
7.4.4	Use of the fund.....	25
7.5	<i>Information Systems</i> .....	25
7.5.1	Contents .....	25
7.5.2	Access .....	26
7.5.3	Eco-labelling .....	26
<b>8</b>	<b>Time frames</b> .....	<b>27</b>
8.1	<i>Policy</i> .....	27
8.2	<i>Framework</i> .....	27
8.3	<i>Instruments</i> .....	27
8.4	<i>Waste reduction targets and reuse and recycle options</i> .....	27
8.5	<i>Capacity</i> .....	27
8.6	<i>Forums</i> .....	27
8.7	<i>Regional Offices of National Departments</i> .....	27
8.8	<i>Interim Measures</i> .....	27
<b>9</b>	<b>Glossary</b> .....	<b>29</b>



# 1 Introduction

The introduction defines the concept of the environment and the scope and purpose of the KwaZulu-Natal provincial draft policy as located within the national policy. It sets out the vision, principles, strategic goals and objectives and regulatory approaches that the provincial government will use for waste management.

The purposes of the draft policy are to inform the public what provincial government's objectives are and how it intends to achieve its objectives, and to inform government agencies (in the provincial sphere) what their objectives should be and what they must do to achieve those objectives.

## 1.1 Definitions of Waste and the Environment

### 1.1.1 Waste

A legal definition of waste, as per Government Notice No 1986 of 24 August 1990, is:

*“An undesirable or superfluous by-product, emission, residue or remainder of any process or activity, any matter, gaseous, liquid or solid or any combination thereof, originating from any residential, commercial or industrial area, which-*

- (a) is discarded by a person; or*
- (b) is accumulated and stored by any person with the purpose of eventually discarding it with or prior treatment connected with the discarding thereof; or*
- (c) is stored by any person with the purpose of recycling, re-using or extracting a usable product from such matter, excluding -*
  - (i) water used for industrial purposes or any effluent produced by or resulting from such use which is discharged in compliance with the provisions of section 21(1) of the Water Act, 1956 or on the authority of an exemption granted under section 21(4) of the said Act;<sup>1</sup>*
  - (ii) any matter discarded into septic tank or french drain sewerage system and any water or effluent contemplated by section 21(2) of the Water Act, 1956 (see footnote 1);*
  - (iii) building rubble used for filling or levelling purposes;*
  - (iv) any radio-active substance discarded in compliance with the provisions of the Nuclear Energy Act, 1982 (Act No 92 of 1982);*
  - (v) any minerals, tailings, waste-rock or slimes produced by or resulting from activities at a mine or works as defined in section 1 of the Mines and Works Act, 1956 (Act No 27 of 1982)*
  - (vi) ash produced by or resulting from activities at an undertaking for the generation of electricity under the provisions the Electricity Act, 1987 (Act No 41 of 1987)”*

### 1.1.2 Environment

Waste has a direct impact on the environment which itself is defined in the national White Paper on Environmental Management Policy, as;

*“the biosphere in which people and other organisms live. It consists of:*

- renewable and non-renewable natural resources such as air, water (fresh and marine), land and all forms of life*
- the natural ecosystems and habitat, and*
- ecosystems, habitats and spatial surroundings modified or constructed by people, including urban areas, agricultural and rural landscapes, places of cultural significance and the qualities that contribute to their value.*

---

<sup>1</sup> The National Water Act, No 36 of 1998, has since replaced this Act. Sections 21 and 22, *inter alia*, of the National Water Act refer to the discharge of wastewater.

- *Culture, economic considerations, social systems, politics and value systems determine the interaction between people and the environment, the use of natural resources, and the values and meanings that people attach to life forms, ecological systems, physical and cultural landscapes and places. People are part of the environment and are at the centre of concerns for its sustainability”.*

Waste has a direct impact on the natural environment and all the other systems mentioned above. Therefore waste management and environmental issues are addressed holistically in this policy.

### 1.1.3 Waste Management

Waste Management is defined as

*a process of effecting minimisation of waste at source, managing the impact of waste on the receiving environment, remediating damaged environment, and evolving and effecting safe and responsible disposal of unavoidable waste.*

## 1.2 Scope and purpose of the draft policy

The Draft Policy has the following sections:

- An **introduction** that sets out the concept of waste and environment used in the policy, the scope and purpose of the policy and the consultative process used in developing this policy;
- A new **vision** for waste policy;
- The **policy principles** that must be applied in developing and testing policy and subsequent actions including decision making, legislation and regulation;
- Provincial government’s **strategic goals and supporting objectives** to begin addressing major issues facing waste management and for measuring the success of policy implementation;
- Government’s approach to **governance**, setting out the powers and responsibilities of the different spheres and agencies of government;
- The **institutional framework** proposed and the **regulatory approach** to waste management; and
- The envisaged **time frames** for carrying out the policy.

## 1.3 Need for draft policy

By virtue of the assignment of substantial portions of Section 24 of the Environment Conservation Act (No 73 of 1989) to provinces, a province may make regulations with respect to Waste Management. The National Environmental Management Act No 107 of 1998, section 11, also requires scheduled organs of state, and every province, to prepare Environmental Management Plans, of which a Waste Management Plan is an integral part. Therefore the KwaZulu-Natal government has engaged in a consultative process, in conjunction with the national Integrated Pollution and Waste Management (IP&WM) process, to develop a waste management policy.

This is an overarching framework policy. Specific subsidiary and sectoral policies to carry forward the detailed tasks of everyday governance will fall within this framework. They must subscribe to the vision, principles, goals and regulatory approach set out in the framework policy.

The policy applies to all governmental institutions and to all activities in any sector that impact on waste management.

## 1.4 The consultation process

The following comprehensive consultation process has been followed in developing this policy.

- The Portfolio Committee of the KwaZulu-Natal Legislature on Environment and Nature Conservation expressed its concern regarding waste management in the province. In April 1995 it initiated a process towards the formulation of a clear policy on waste management for the

province, which it intended to use as a basis for promulgating legislation to address the problems of waste management effectively.

- This was put on hold pending the outcome of the Consultative National Environmental Policy Process (CONNEPP). Waste management, particularly hazardous waste, was highlighted as a “burning issue” in the province’s consultation phase of the CONNEP process in the second half of 1996.
- Agreement was reached at the Provincial CONNEPP Conference that there was a need to fast track the development of policy, and subsequently legislation, regarding general and hazardous waste in KwaZulu-Natal.
- In October 1996 the then KwaZulu-Natal Minister of Traditional and Environmental Affairs and the Portfolio Committee on the Environment and Nature Conservation initiated the KwaZulu-Natal Waste Management Policy Process. A Task Group, which later became a multi-stakeholder Steering Committee, was established to oversee the process.
- A discussion document was produced by the Steering Committee and widely distributed to interested and affected parties for comment in April 1997.
- A series of regional workshops on the national IP&WM and provincial Waste Management Policy discussion documents were held in July 1997.
- A provincial workshop on waste management policy was held on 8 and 9 August 1997 using the comments received on the discussion document and the outcomes of the regional workshops as a basis.
- A draft policy was derived from the provincial consultation on waste management described above, in addition to written comment received.
- The Department of Agriculture and Environmental Affairs identified the need to provide an opportunity for key role players and the public in the Province to be updated on developments relating to waste; and to discuss matters relating to provincial policy, legislation, regulations and strategies in order to give clear direction to provincial pollution prevention and waste management planning.
- A provincial Waste Imbizo was held on 19 & 20 October 2001 at the International Convention Centre in Durban.
- This update of the Draft Policy has been produced in the light of the proceedings at that Imbizo.

## 2 Vision

Government must facilitate waste avoidance, minimisation, re-use, recycling, restore, and separation at source and safe disposal of unavoidable waste.

The ideal vision in KwaZulu-Natal has been expressed as one of zero waste. However, as an interim step towards this vision, a more realistic short-term goal is the generation of as little waste as possible with the minimum of negative impacts on the environment.

The vision, underpinned by a commitment to the establishment of clear, easy to follow, moral and ethical principles, includes:

- The avoidance of waste;
- A decrease in over-consumption, especially of non-renewable resources and non-recyclable materials;
- Encouraging government departments and industries to use recycled paper and materials;
- Facilitating the marketability of recycled materials
- The generation of less waste without an increase in concentration or the degree of hazard;
- The implementation of clean production processes;
- The development and adoption of alternative methods and technologies to avoid waste;
- The production of sustainably recyclable products, and the establishment of a recycling infrastructure;
- The empowerment of the people by capacitating them on how to turn waste into a resource;
- The setting, and achievement, of waste reduction targets even at the procurement stage;
- The provision of adequate waste disposal services for all residents in the province;
- The identification of appropriate sites and the timely establishment of waste disposal facilities that take full account of the need for equity and environmental justice;
- The provision of better information and comprehensive databases, including audit trails and life-cycle analyses;
- Integrated legislation supported by an integrated management approach with capable institutions
- Cooperation between public and private sectors and civil society;
- The active involvement of all communities and workers in waste management processes;
- The protection of the health and safety of the community and workers;
- Clear, easy to follow planning guidelines that are ecologically sustainable; and
- A cleaner environment for future generations.

## 3 Principles

Principles are the basis on which government will apply, develop and test policy and subsequent actions including decision-making, legislation, regulation and enforcement. In all these functions government will follow the principles of *transparency* and *accountability*.

### 3.1 Alternative Technologies

Alternative and appropriate technologies should be thoroughly investigated prior to decisions about full-scale production processes, or waste management options, being taken. This does not imply lower environmental quality.

### 3.2 Capacity Building and Education

All people must have the opportunity to develop the understanding, skills and capacity for effective participation in achieving sustainable development and sustainable resource use, especially in the reduction and management of waste.

### 3.3 Conception to decomposition

All processes and products must be designed to take into account the hierarchy of waste management practices, namely avoidance, reduction of waste at source, reuse, recovery and recycling with safe disposal as the last resort<sup>2</sup>. Responsibility for the waste generated by any process or product remains the responsibility of the producer from the conception stage to the final decomposition stage.

### 3.4 Conflict of Interest

Actual or potential conflicts of interest between agencies responsible for waste management must be resolved. Solutions to such conflicts of interest must ensure effective implementation of policy and provide for the role of the lead agent in monitoring and ensuring the maintenance of norms and standards.

### 3.5 Coordination

Waste management concerns affect all aspects of life and must be integrated into the work of all government institutions. This requires intergovernmental harmonisation of policies, legislation, monitoring, regulation and other environmental functions in accordance with the requirements of environmental policy.

### 3.6 Equity

There should be equitable access to waste management resources, processes, benefits and services to meet basic needs and ensure human well being. Each generation has a duty to avoid impairing the ability of future generations to ensure its well being.

### 3.7 Environmental Justice and Participation

To comply with the requirements of environmental justice, government must integrate environmental considerations with social, political and economic justice and development in addressing the waste management needs and rights of all communities, sectors and individuals.

Policy, legal and institutional structures must:

---

<sup>2</sup> Taken from section 2.2.2 of the White Paper on Integrated Pollution and Waste Management for South Africa.

- Redress past and present environmental injustice, and avoid future, environmental injustice;
- Take account of the need to protect and create employment that is not hazardous;
- Recognise that workers can refuse work that is harmful to human health or the environment;
- Ensure that everyone is able to make known environmental or health hazards without fear of the consequences;
- Ensure equitable representation and participation of all with particular concern for marginalized groups; and
- Underpin the principle of clean production.

### **3.8 Full Cost Accounting**

Decisions must be based on an assessment of the full social and environmental costs and benefits of policies, plans, programmes, projects and activities associated with waste management, including inter-generational and life cycle costs.

### **3.9 Cooperation and Responsibilities**

Government must recognise its shared responsibility for global, continental, national and regional waste issues and act with due regard for the principles contained in this policy and applicable international, national and regional conventions and agreements.

### **3.10 Inclusivity**

Waste management processes must consider the interests, needs and values of all interested and affected parties in decision making to secure sustainable development.

### **3.11 Integration**

All elements of the environment are linked and waste management must therefore take account of the connections between them.

### **3.12 Open Information**

Everyone must have access to meaningful information to enable them to:

- Protect their health and well being;
- Protect the environment;
- Participate effectively in environmental governance; and
- Comply with environmental policy, legislation and regulation.

### **3.13 Precaution**

Government will apply a risk averse and cautious approach that recognises the limits of current knowledge about the social and environmental consequences of decisions or actions. Waste of incompletely known composition or hazard is to be classified and treated on the basis of a worst-case scenario. The most toxic element of the life cycle of the waste shall determine the level of hazard.

### **3.14 Prevention**

Government should strive to anticipate problems and must prevent negative impacts on the environment and on people's health and environmental rights.

### **3.15 Polluter Pays**

Those responsible for environmental damage must pay the repair costs both to the environment and human health, and the costs of preventive measures to reduce or prevent further pollution and environmental damage.

### 3.16 Sustainability

All production processes should strive towards sustainability by ensuring that such processes are designed to eliminate or minimise waste, and where waste is inevitable, that such wastes are suitable as raw materials for other processes. All organisations must research such options, including retro fitting.

## 4 Strategic Goals and Objectives

This chapter sets out the priorities for achieving the vision and focussing government action on waste management in the form of broad strategic goals and supporting objectives. These goals chart the direction provincial government will follow in meeting its commitment. The strategic goals include the governance of various sources of waste and the associated stages in the waste life cycle. However, capacity levels differ in certain areas. It is recognised that management capacity is needed to initiate these policies and that it takes time for political processes to reach their completion. The time frames in which the following goals should be achieved, or mechanisms should be in place that will lead to their realisation, are detailed in Chapter 8 below.

### The overarching goal

**To establish an equitable, just, integrated and holistic system of waste management, involving all stakeholders in waste education, avoidance, minimisation, re-use, reduction, recycling, elimination where possible, and safe disposal of unavoidable waste**

### 4.1 Strategic goals

The general objective is:

- To establish an equitable system of governance of all generators and all handlers (transporters, processors, recyclers, disposers) of waste, with an emphasis on eliminating illegal practices;
- To register all waste generators and handlers;
- To ensure access to information;
- To educate about waste management;
- To develop appropriate enforcement strategies; and
- To enforce and monitor application of laws.

### 4.2 Specific goals and objectives

#### 4.2.1 General Waste

Domestic waste:	Goals for domestic waste management include education and information about sanitation, waste separation and recycling at source. Government will facilitate the provision of appropriate measures to deal with litter and waste from the informal waste stream.
Solid waste:	Goals include the management of solid waste on-site and where necessary the safe transport to a suitable, licensed landfill site.
Rural waste:	The goal is to establish waste management practices in rural areas appropriate to the community. The provision of adequate and appropriate facilities, not implying lower environmental standards, is a priority.
Waste in Informal Settlements:	The goal is to devise and implement adequate and appropriate systems and facilities, not implying lower environmental standards, for informal settlements.
Waste in estuaries:	The objective is to restore our estuaries to pristine state through effective waste management strategy.

## 4.2.2 Hazardous waste

### 4.2.2.1 Disposal sites

- To identify the need for hazardous waste disposal sites and address the subsequent siting and management issues if such a need exists; and
- To redress past environmental racism in the siting of hazardous waste sites.

### 4.2.2.2 Monitoring

- To monitor the importation of hazardous and bio-hazardous waste into the province; and
- To establish a waste information system for monitoring purposes.

### 4.2.2.3 Regulations and guidelines

- To develop a fast-tracked plan of action with specific goals and time frames for the substantial reduction and eventual elimination of hazardous waste;
- Where elimination of waste is impossible, waste of a less hazardous nature will be aimed for;
- To frame appropriate regulations specifically for the handling, storage and transport of hazardous waste, and the monitoring thereof;
- To address the disposal of hazardous waste generated in the province, and ensure understandable guidelines and standards for hazardous and bio-hazardous waste management are created;
- To actively promote the re-design and retro-fitting of processes to eliminate, reduce or minimise the production of hazardous waste; and
- To clarify the roles and responsibilities of the government departments responsible for waste in the spirit of cooperative governance.

### 4.2.2.4 Education

- To develop appropriate education and training on the safe disposal of hazardous waste by households, including used condoms.

## 4.2.3 Recycling

### 4.2.3.1 Regulations, guidelines and standards

- To develop appropriate procedures and regulations to promote recycling, including the return of used hazardous chemical containers to the manufacturer and the reformulation of obsolete chemicals by the manufacturer;
- To examine and regulate the environmental impacts of conversion or manufacture of other products from recycled materials; and
- To develop models or systems for re-cycling that are cost-effective and income generating.
- To promote and encourage the use of recycled material (e.g. paper) by government departments.

### 4.2.3.2 Education

- To facilitate education for all about recycling.

## 4.2.4 Health care waste

### 4.2.4.1 Management

- To actively investigate and adopt proven technologies for the management of medical waste, using the Best Practicable Environmental Option principle; and
- To work closely with the Department of Health in the appointment of Waste Managers for hospitals with more than a pre-determined number of beds.

#### 4.2.4.2 Monitoring

- To ensure the specialised management and audit of medical waste, prior to disposal; and
- To ensure that regular audit of hospitals with more than a pre-determined number of beds takes place to ensure compliance with health and safety regulations.

#### 4.2.4.3 Regulations and guidelines

- To work closely with the Department of Health to formulate a Medical Waste Strategy for the province;
- To develop and enforce Guidelines for Medical Waste Management in the province, including:
  - the registration of private practices and small generators of health care waste; and
  - the appropriate disposal of urine and faecal samples;
- To develop clear guidelines and regulations regarding the incineration of health care waste in existing incinerators; and
- To frame appropriate regulations specifically for the handling, storage and transport of health care waste, and the monitoring thereof.

#### 4.2.4.4 Education

- To promote the elimination of PVC-based materials and mercury-based equipment at the procurement stage in all health care facilities in the province and their replacement with clean technology;

### 4.2.5 Low-level radioactive waste

#### 4.2.5.1 Monitoring

- To register all producers, users and managers of products and processes that generate low-level radioactive waste, including a full audit trail identifying the sources of the wastes being generated, their on-site management and their environmental fate;
- To ensure that regular audit of such organizations take place to ensure compliance with health and safety regulations; and
- To ensure that all such products and processes are subject to frequent re-evaluation and alternative technologies are implemented where and when these become available or feasible.

### 4.2.6 Waste from Economic Activity

#### 4.2.6.1 Disposal

- To ensure that all industrial wastes, irrespective of the size of the operation, are dealt with in the formal waste stream.

#### 4.2.6.2 Regulations and guidelines

- To set standards for emission control with respect to effluents, whether solid, liquid, or atmospheric emissions;
- To regulate the use of swills from ships, aircraft and food houses as any part of feed for animals; and
- To establish mechanisms to govern mining and military wastes by the same principles as all other wastes.

#### 4.2.6.3 Education

- To encourage the use of clean production and clean technology, and establish a infrastructure for recycling;
- To encourage finding and the use of better alternatives to agricultural practices that impact on the environment, examples are the burning of cane and use of pesticides; and
- To promote initiatives of turning unavoidable waste into resources, waste recovery, and marketing of the ensuing products.

## 4.2.7 Transport, storage and handling of waste

### 4.2.7.1 Management

- To plan for the transport of waste in conjunction with the provision of appropriate waste facilities; Hazardous waste must be transported the least distance practicable;
- To create a framework within which waste management technology and expertise is freely exported, but waste for recycling or disposal is not imported or exported across the province's international boundaries; and
- To ensure the provision of environmentally safe storage facilities for hazardous chemicals at harbours.

### 4.2.7.2 Monitoring

- To register waste transporters and enforce the manifest system;

### 4.2.7.3 Regulations and guidelines

- To establish inter-provincial negotiation, regulation and control over the inter-provincial import and export of waste;

## 4.2.8 Effective institutional framework and legislation

### 4.2.8.1 Institutional framework

- To create an effective, adequately resourced and harmonised institutional framework, an integrated legislative system, and to build institutional capacity.

## 4.2.9 Environmental conflict management

### 4.2.9.1 Mediation

- To provide for environmental mediation in cases of dispute over the application of this policy; Mediators will handle conflicts and if no resolution is reached the case will be referred to the judiciary.

### 4.2.9.2 Establishment of an environmental court

- To enter into negotiations with the appropriate government departments for the establishment of an Environmental Court to try cases that involve transgressions of environmental legislation.

## 4.2.10 Sustainable resource use and impact management

### 4.2.10.1 Integration

- To integrate waste management with all economic and development activities to achieve environmentally sustainable development and economic activity.

## 4.2.11 Energy conservation

The energy sector is responsible for contributing to the waste generation process and the emission of greenhouse gasses that lead to climate change. The Clean Development Mechanism is designed to reduce Greenhouse Emissions. One way to achieve this is by sourcing other alternatives such as biomass, solar, wind and thermal energy. The Kyoto Protocol has excluded nuclear energy from the options. KwaZulu-Natal should come up with a statement supporting such other sources of energy.

### 4.2.11.1 Research

- To investigate and promote ways of generating supplementary energy such as waste-to-energy recovery (e.g. landfill gas) and by utilising biomass (e.g. cane trash and other waste) as potential alternative sources of energy.
- To promote energy conservation measures in buildings by

- Energy efficient architecture, siting, orientation and construction;
- Use of energy-frugal devices (e.g. fluorescent and compact fluorescent lighting); and
- Consciously frugal energy consumption.

#### 4.2.11.2 Monitoring

- To monitor the emission of greenhouse gases by landfill sites.

### 4.2.12 Holistic and integrated planning

#### 4.2.12.1 Planning processes

- To develop mechanisms to ensure that waste considerations are effectively integrated into the development of government policies and programmes, all spatial and economic development planning processes and all economic activity; Consideration of the waste management hierarchy, (i.e. avoidance, minimisation, reuse, recycling, safe disposal) must be included in all planning.
- To ensure that Strategic Environmental Assessments, Environmental Impact Assessments and Social Impact Assessments, which take into account the cumulative impacts on, and the assimilative capacity of, the receiving environment including humans, are included in overall planning; and
- To ensure that all Integrated Development Plans in the province include a waste management plan.

### 4.2.13 Methods of disposal

#### 4.2.13.1 Research

- To actively pursue alternative methods of safe disposal, strictly applying the precautionary principle.

#### 4.2.13.2 Regulations and guidelines

- To set provincial standards and promulgate regulations to govern all disposal methods including those to the marine environment in consultation with the national Department of Environmental Affairs and Tourism.

### 4.2.14 Participation and partnerships in waste governance and management

#### 4.2.14.1 Disposal sites

- To ensure that informed agreement is reached between all stakeholders regarding the siting of the waste disposal sites.

#### 4.2.14.2 Governance

- To establish mechanisms and processes to ensure effective public participation and inter-departmental partnerships in waste governance and management. These could include community-based ventures such as curbside collection programmes and waste utilization initiatives such as composting and craft making.

#### 4.2.14.3 Monitoring

- In principle, to offer rewards to whistleblowers where their information has resulted in successful prosecution.

## 4.2.15 Environmental Impact Assessments

### 4.2.15.1 Consultation

- To consult with affected parties and effectively involve all stakeholders in Environmental Impact Assessments.

### 4.2.15.2 Regulations and guidelines

- To facilitate the creation of a list of accredited Environmental Impact Assessment practitioners with the necessary competence for a particular field of investigation, and for peer review. The Environmental Impact Assessment Regulations address the issue of the independence of consultants.

### 4.2.15.3 Education

- To facilitate the development of the capacity of communities to make informed decisions by ensuring that all technical information is presented in a user-friendly manner and that the full implications of any proposed development are fully disclosed to the affected parties in an accessible and transparent manner.

## 4.2.16 Empowerment and waste education

### 4.2.16.1 Education and capacity building

- To increase public awareness of, and concern for, waste issues and assist in developing the knowledge, skills, values, and the commitment necessary to achieve sustainable development;
- To educate all stakeholders in a new paradigm of waste avoidance, minimisation, reduction, reuse, recycling and safe disposal;
- To create waste recycling and reuse opportunities with financial, institutional and educational support from the appropriate sphere of government;
- To work with the appropriate government departments to develop the capacity of prosecutors and law enforcers; and
- To ensure that all health-care staff are properly trained in waste management.

## 4.2.17 Information management

### 4.2.17.1 Access

- To develop and maintain mechanisms to increase access to information and ensure effective management of waste information and its dissemination.

### 4.2.17.2 Monitoring

- To establish a database based on mass balance, waste produced, disposal methods, the cost of waste and the cost of disposal;
- To ensure that such a database is updated at the provincial sphere and is publicly accessible; and
- To use the information from such a database to provide incentives that promote waste avoidance and minimisation, and clean production.

### 4.2.17.3 Education

- To ensure that relevant information and education is available in all appropriate official languages.

## 5 Governance

This chapter describes the constitutional setting for waste management policy and sets out the essential requirements for effective waste governance.

### 5.1 Constitutional Setting

The Constitution sets out the legislative and executive authority of different spheres of government within a framework of cooperative governance. It states that national and provincial governments have concurrent responsibility for environmental management. This section sets out the implications for government of the general and specific clauses in the Constitution that have a bearing on waste management.

#### 5.1.1 Powers of the provincial sphere of government

In terms of the Constitution, provincial and local government have concurrent competence, to the exclusion of national government, in the areas relating to refuse dumps and solid waste disposal. Yet the Environment Conservation Act (73 of 1989) provides that no one may establish or operate a refuse dump without a permit from the Minister of Water Affairs and Forestry. The Act also authorises the Minister of Environmental Affairs and Tourism to make regulations with regard to waste management.

#### 5.1.2 Intergovernmental cooperation

There is a distinction between the national Integrated Pollution & Waste Management (IP&WM) policy and provincial Waste Policy. The national process provides an umbrella, but the constitution allows the province to decide on issues relevant to KwaZulu-Natal. Provincial policies must, however, be in line with national standards. Province should have authority over all waste issues and institutions, including state controlled institutions. Such authority should be devolved to the most competent level. An interface between provinces in terms of trans-boundary transport of waste is necessary and there needs to be a conflict resolution mechanism between provinces.

#### 5.1.3 Accountability and participation

Section 195 (1) (e-g) of the Constitution states that public administration must be accountable, transparent, and through the provision of timely, accessible and accurate information, must respond to people's needs and must encourage public participation in environmental governance.

#### 5.1.4 Environment Conservation Act

Sections 20 and 24 of the Environment Conservation Act (No 73 of 1989), as amended, assign specific responsibilities to provinces.

#### 5.1.5 National Environmental Management Act

The National Environmental Management Act No 107 of 1998, Section 11, requires all scheduled organs of state and provinces to compile Environmental Management Plans. Waste management is an integral part of environmental management and is specifically mentioned in sections 2 (4)(a)(iv) and 31.

### 5.2 Essential requirements for effective waste governance

Provincial government has an obligation to ensure that national norms, standards, legislation, administration, enforcement and all other aspects of waste management governance are dealt with uniformly across departments and in all spheres of government. In order to achieve this the provincial

government should have its own policy and legislation on waste management that is in accordance with the national framework.

The implementation of an integrated and holistic waste management system must recognise the existing legislative and executive responsibilities and structures.

## **5.3 Allocation of functions**

The present allocation of functions gives a wide range of government agencies responsibilities for waste management. An Integrated Waste Management plan for KwaZulu-Natal must include the regional and local authorities in the province, clarifying responsibilities and encouraging pro-activity.

Speedy, rational decision making procedures must be coupled with arbitration mechanisms. The duality of functions, which leads to 'players also being referees' must be eliminated

The roles of all stakeholders must be clarified.

### **5.3.1 Accreditation and capacity building**

The establishment of a mechanism for the accreditation of all agents who deal in waste, as well as capacity building and training for all regulators and administrators is seen as a priority. Responsibility for waste management should rest with that sphere of government that has the requisite level of competence and capacity. Bigger local authorities usually have the capacity to do this, but many others, especially rural areas, do not. Communities must also be allowed to initiate an audit of competency to supplement an audit of resources and capacity to be undertaken by the lead agent.

Everyone has the responsibility to educate, but it is the responsibility of provincial government and other spheres to ensure it happens.

### **5.3.2 Achieving integrated and coordinated environmental and waste management**

Given the fragmentation of environmental and waste functions throughout government institutions, all departments and other organs of state in all spheres must comply with government's national policy on environmental management to achieve integrated and holistic environmental management. Co-operative governance is essential and the Department of Agriculture and Environmental Affairs will take the lead in coordinating an integrated approach to waste management in the province.

### **5.3.3 Environmental Court**

When environmental cases come before the courts many court officials do not have the necessary expertise or knowledge to conduct such cases effectively. For this reason it is desirable that an Environmental Court be established, staffed by judges (or magistrates) and prosecutors with specialised knowledge of environmental issues and environmental law.

While it is not within the competence of the provincial government to establish such a court, the Department of Agriculture and Environmental Affairs will motivate for the establishment of an Environmental Court through the appropriate organs of state, such as the National Council of Provinces and appropriate meetings with the relevant national ministries.

## 6 Institutional Framework

### 6.1 Department of the Environment

The existing provincial KwaZulu-Natal Department of Agriculture and Environmental Affairs has been structured with a responsibility for all environmental matters. This policy sets out only the waste management aspects with which this department will be concerned, in particular its role as lead agent in waste management.

### 6.2 Lead Agent

By virtue of assignments by the Environment Conservation Act (No 73 of 1989) to KwaZulu-Natal and the Premier's designation, the Department of Agriculture and Environmental Affairs will act as lead agent with respect to the Environment Conservation Act (No 73 of 1989).

The role of the provincial Department of Agriculture and Environmental Affairs, as lead agent, will be to:

- Develop and implement an integrated and holistic waste management system;
- Coordinate and supervise waste functions in all spheres of government;
- Develop and enforce an integrated and comprehensive regulatory system;
- Enforce compliance with this policy;
- Practise self regulation and subject itself for independent environmental auditing; and
- Provide regular reports on the state of Waste Management in the province.

Legislation must empower the lead agent to play its role in accordance with the provisions of the Constitution and give it the necessary coercive powers to ensure compliance with national and provincial policy on waste management, waste legislation, norms and standards. The lead agent will ensure that policy, legislation, norms and standards address current problems and provide proactive solutions.

To ensure effective integrated waste management, the lead agent will provide leadership and guidance to enable other provincial departments and local authorities to meet their executive obligations in respect of waste management. In performing these functions the lead agent will act in accordance with the requirements of cooperative government.

#### 6.2.1 Responsibilities of the lead agent

As lead agent for waste management, the provincial Department of Agriculture and Environmental Affairs will be custodian of the province's waste management policy. It will fulfil its Constitutional, executive and legislative obligations by taking the lead in integrating and coordinating waste management functions as set out below.

##### 6.2.1.1 Advisory forums

- Facilitate the setting up of representative, multi-stakeholder Provincial, Regional and Local Environmental Advisory Forums;
- Investigate the formation of an umbrella body for environmental NGOs to act as a repository for information and co-ordinate activities; and
- Encourage and facilitate public participation in the advisory forums.

##### 6.2.1.2 Capacity building

- Assist other provincial departments and municipalities to develop waste management capacity;
- Do audits to check the waste management capacity availability; and

- Intervene where little or no capacity exists in municipalities.

#### 6.2.1.3 Coordination

- Ensure the integration and coordination of waste management functions within and between government departments and other organs of state in all spheres; and
- Establish mechanisms and procedures for the resolution of intergovernmental disputes.

#### 6.2.1.4 Enforcement

- Enforce national and provincial standards;
- Regulate and enforce waste matters that are not dealt with by local government;
- Consult and coordinate with other provincial departments on the enforcement of waste management functions that directly affect their core business or line functions, to ensure the compliance with environmental norms and standards and achieve integrated waste management; and
- Audit waste sites.

#### 6.2.1.5 Information and reporting

- Develop information management systems to collect and process information; disseminate it and make it accessible to interested and affected parties;
- Report regularly and transparently on the state of waste management;
- Take the lead in setting up mechanisms and processes for information exchange and consultation between all government agencies with waste management functions; and
- Identify research areas for which funding is required.

#### 6.2.1.6 Monitoring and review

- Supervise and review the waste management performance of other provincial departments and local government institutions including that of itself, ensuring that best practice is developed and followed;
- Issue, review and revoke authorisations and permits;
- Register and certify generators and operators of waste;
- Facilitate the creation of a list of accredited Environmental Impact Assessment practitioners;
- Monitor marine outfalls and storm water discharge into the sea; and
- Monitor legal mining and the sale of its products in cooperation with the Department of Minerals and Energy.

#### 6.2.1.7 Participation and appeals

- Establish a specific line function that facilitates public participation in waste management governance; and
- Set up procedures for appealing against waste management decisions made by administrative agencies and resolve conflicts at the lowest possible sphere.

#### 6.2.1.8 Policy, strategy and legislation

- Develop provincial policies, legislation, standards and regulations within national parameters
- Implement national Integrated Pollution and Waste Management policy;
- Implement the Action Plans of the National Waste Management Strategy;
- Implement or perform delegated functions;
- Act as a “one-stop-shop” for all authorisations and permits that deal with environmental impacts of Schedule 1 physical development in the province;
- Assume local responsibilities where local spheres lack capacity after due consultation with such local government;
- Coordinate the effective participation of all stakeholders in the establishment of waste disposal facilities;
- Carry out SEAs and integrate their findings into a holistic provincial land use plan; and
- Formulate guidelines for management of underground storage of hydrocarbon, burning of sugar cane and aerial spraying of chemicals on crops.

#### 6.2.1.9 Research

- Initiate research into the existing levels of background pollution in all media and the cumulative effects of this.

### 6.2.2 Powers of the lead agent

In order to fulfil its responsibilities as lead agent, the KwaZulu-Natal Department of Agriculture and Environmental Affairs will have statutory powers to:

- Ensure compliance by the public with provincial policy on waste management, legislation, norms and standards;
- Ensure that provincial and local government and organs of state comply with, and give effect to, provincial waste management legislation, norms, standards and guidelines in performing their waste management functions;
- Review the waste management impacts of provincial and local government policies, strategies, plans, programmes and actions and ensure that they conform with provincial policy on waste management, legislation, norms and standards;
- Enact legislation to give the provincial Department of Agriculture and Environmental Affairs *locus standi* to enforce provincial norms and standards in terms of all legislation that has an effect on waste management; and
- Intervene in instances where municipalities fail to fulfil an executive obligation in respect of a waste management function as provided for in Section 100 of the Constitution.

#### 6.2.2.1 Responsible and accountable governance

As lead agent the provincial Department of Agriculture and Environmental Affairs will exercise its powers within the framework of cooperative governance as required by the Constitution. It will respond to public needs and provide mechanisms for public participation in waste management governance.

To achieve sustainable development and improve waste management governance, provincial government must ensure that:

- Its officials are diligent, accountable and committed to the principles set out in this policy;
- It employs sufficient personnel with the necessary skills to carry out its functions effectively; and
- It uses financial resources efficiently in giving effect to this policy.

#### 6.2.2.2 Integration and coordination

The provincial Ministry and Department of Agriculture and Environmental Affairs must provide for effective integration and cooperation with all government agencies and other role players in implementing the provincial policy on waste management. To give effect to this the competent Minister will investigate the legal ramifications of establishing a provincial waste management coordinating committee.

#### 6.2.2.3 Relations with government agencies in all spheres

All provincial government agencies and organs of state are obliged to implement the provincial policy on waste management. Provincial government shall pass legislation to oblige all government agencies and organs of state to adhere to provincial waste management norms and standards.

Inter-ministerial and inter-departmental coordination and integration of waste management functions in all spheres of government is necessary in making and implementing policy, and to achieve integrated and holistic waste management. The onus is on all departments and other organs of state in all spheres of government, which perform waste management functions or any activity that has an impact on waste management, to consult and inform the provincial Department of Agriculture and Environmental Affairs.

These departments and other organs of state shall reach agreement with the Department of Agriculture and Environmental Affairs and obtain its concurrence on:

- The development of policies, strategies and legislation;
- Compliance with national and provincial environmental norms and minimum standards;
- Enforcement of waste management legislation and regulations; and
- All waste matters of common interest.

The Department of Agriculture and Environmental Affairs will coordinate the waste management activities of sectoral lead agents to achieve integrated waste management. The lead agent and all provincial government organs that perform waste management functions must:

- Coordinate their actions and integrate waste management concerns into all provincial government policies, plans, strategies, programmes and activities with an impact on waste management;
- Work together to coordinate legislation, and endeavour to integrate legislation wherever possible;
- Make every reasonable effort to settle intergovernmental disputes by using established mechanisms and procedures before resorting to mediation and court action;
- Adhere to agreed processes and procedures;
- Negotiate cooperative agreements on the implementation of provincial policy on waste management; and
- Consult each other before issuing and withdrawing authorisations, permits and exemptions, or proceeding with prosecutions, e.g. before any authorisation is given for housing (state or otherwise) commercial, industrial development etc a proper waste management plan is drawn up.

#### 6.2.2.4 Relationships with interested and affected parties

In fulfilling its commitment to participatory waste management governance, the provincial Department of Agriculture and Environmental Affairs will involve interested and affected parties in civil society in:

- Developing and implementing waste management policy;
- Developing legislation;
- Setting norms and standards;
- Monitoring waste management impacts;
- Developing guidelines governing activities that might impact the environment;
- Entering into Waste Management Co-operation Agreements with role players in the waste industries;
- Evolving Environmental Co-operative Agreements; and
- Promote the establishment of organs for public participation.

Government will enact legislation to ensure that:

- People have legal standing to take action to protect their environmental rights; and
- Every person and organisation acts with due care, according to their capacity, to avoid environmental damage.

## 6.3 Advisory Forums

The Department of Agriculture and Environmental Affairs will facilitate the setting up of representative, multi-stakeholder Provincial, Regional and Local Environmental Advisory Forums and promote the establishment of organs for public participation.

The various spheres of government shall make available resources to ensure that the forums are fully functional.

The Department of Agriculture and Environmental Affairs will initiate a process of finalising the composition, powers and functions of the advisory forums proposed below.

## 6.3.1 Composition

### 6.3.1.1 Local Environmental Advisory Forums (LEAFs)

Local Environmental Advisory Forums will be established in Category B municipalities. These advisory forums will consist of representatives of civil society and business and industry elected at a multi-stakeholder public meeting, together with representatives of the local council.

### 6.3.1.2 District Environmental Advisory Forums (DEAFs)

District Environmental Advisory Forums will be established in Category A and C municipalities. Each District Environmental Advisory Forum shall consist of elected representatives of the LEAFs within the demarcated district council.

### 6.3.1.3 Provincial Economic Advisory Forum (PEAF)

A Provincial Environmental Advisory Forum will be established, consisting of elected representatives of the DEAFs.

## 6.3.2 Responsibilities

### 6.3.2.1 Scope

The relevant forum shall consider all decisions taken by any authority that have an impact, or potential impact, on the environment. Local forums shall consider decisions with local impacts; district forums consider decisions with district wide impacts; and the provincial forum considers decisions with province wide impacts.

### 6.3.2.2 Consensus

Wherever possible consensus must be reached within the forum on whether to recommend that projects affected by such decisions should go ahead; under what conditions; and the specific requirements that should be fulfilled by such projects. These recommendations must be reduced to writing, and personnel of the relevant authority are expected to report back on such projects, and their compliance with such conditions or otherwise.

## 6.3.3 Authority

Responsibility for environmental decisions shall ultimately lie with the relevant authority, which is required to provide reasons in writing to the forum for all decisions.

An appeal mechanism must be provided for, that allows people to appeal without incurring financial costs. A mechanism may also be required to handle “frivolous” or vexatious appeals.

## 6.3.4 Powers

### 6.3.4.1 Referral

Should consensus within a forum not be reached, the advisory forum may refer such project to either the next higher level of forum, or the Ombudspersons.

### 6.3.4.2 Information

The forum shall have the power to call for further information, or specific research, as it pertains to any proposals. Forums shall also have the power to disseminate information regarding matters considered by them, subject to existing legislation and regulations.

## 6.4 Ombudspersons

The KwaZulu-Natal government will set up an independent body to act as environmental Ombudspersons. This body will consist of an appropriate balance of regulators, the regulated and interested and affected parties.

### 6.4.1 Appointment and accountability

The Ombudspersons will be appointed by the MEC for Environment of KwaZulu-Natal in consultation with the cabinet or with the Premier-in-Executive. The Ombudspersons will be responsible, and report annually, to the MEC who shall table the report in the KwaZulu-Natal Legislature within an agreed time frame.

### 6.4.2 Responsibilities

Without detracting from the statutory functions and responsibilities of the relevant MEC, the Ombudspersons will be responsible for the following, *inter alia*:

#### 6.4.2.1 Consultants

Approving a list of consultants.

#### 6.4.2.2 Appeals and reviews

Making an initial decision on matters of appeal and review, before referral to the MEC; conduct audits; and control monitoring.

#### 6.4.2.3 Mediation

The resolution of conflicts around auditing, monitoring and the selection of consultants for Environmental Impact Assessments or any other matter arising from the application of this policy. If resolution of the conflict is not possible the Ombudspersons will have the power to refer the matter to the judiciary.

## 6.5 Coordination of Functions

### 6.5.1 Delegation

Provincial government must ensure that there is no confusion about areas of waste management jurisdiction and no duplication of functions between different departments and spheres of government. Waste management functions and responsibilities may be consolidated within the provincial Department of Agriculture and Environmental Affairs, or executed by extension in other agencies. The Department of Agriculture and Environmental Affairs will at all times retain responsibility for the execution of these functions.

In determining the delegation of powers, responsibilities and functions to other agencies and municipalities, provincial government must bear in mind the need to maintain the integrity of this policy. To this end it will apply the following criteria:

- The provisions of the Constitution Act 108 of 1996, Schedules 4 and 5;
- Effectiveness in ensuring sustainable development;
- Effectiveness in achieving integrated and coordinated waste management;
- The need to resolve conflicts of interest;
- The ability to secure participation by interested and affected parties in waste management governance;
- Giving effect to the people's environmental rights, especially through the involvement of the relevant environmental advisory forums;
- The constitutional requirements for national supervision, concurrent competencies and cooperative governance; and

- Existing waste management capacity in government institutions and the potential for developing this capacity in the future.

These criteria will direct provincial government in determining the most effective means of achieving integrated waste management.

### 6.5.2 Capacity building

The provincial government commits itself to developing the capacity of all its institutions to implement waste management policy effectively. Where capacity does not exist, it will endeavour to provide for transitional measures to meet governance commitments until capacity exists. Where there are no appropriate government institutions, government will investigate other options including the establishment of new institutions.

## 7 Regulatory Mechanisms

The following mechanisms and instruments will be used in implementing the provincial government's policy on waste management. They may be used in different combinations or ways depending on the requirements of a particular situation. The four main mechanisms that will apply in KwaZulu-Natal are:

- Command and control mechanisms (direct measures);
- Voluntary agreements (indirect measures);
- Economic instruments; and
- Information systems.

### 7.1 Command & Control (direct measures)

Legislation and policy are the most commonly used command and control mechanisms for waste management and minimisation. Other mechanisms include the registration of generators, transporters, disposers of waste, and auditable waste trails and monitoring. For these measures to be effective the following are proposed.

#### 7.1.1 Legislation

- Initiating a participative process that will lead to legislation prohibiting the use or generation of substances known to have a deleterious effect on the environment.
- Making separation at source mandatory.
- Promoting avoidance, reduction, minimisation, re-use, repair, recovery, re-manufacture and recycling.
- The reinstatement of the registration of businesses and industries including the registration of waste produced or handled.
- Enforcement of penalties, which may include stringent fines and revocation of permits, to ensure compliance. Fines will be linked to the magnitude of pollution and the degree of profit from the illegality. Funds generated from these fines should be put back into the waste management system. This could form part of the Fidelity Trust Fund discussed in Section 7.4 below.
- Transgressors should be made known to the public.
- If it appears probable that a certain waste generator or handler is responsible for a transgression, then that person or waste generator will be required to suspend their operations until such time as it has been established whether they are responsible or not.

#### 7.1.2 Waste reduction standards and targets

- Initiating a participative process that will lead to the setting, and achievement, targets for waste reduction, including avoidance, minimisation, re-use, recovery, repair, re-manufacture and recycling.
- Prescription of quality design standards that exceed nationally prescribed standards for landfill construction and for any waste-handling infrastructure.
- Setting standards that are reasonable, acceptable to stakeholders, enforceable and achievable.
- Setting of environmental quality objectives in consultation with stakeholders in order to formulate sustainable ambient or receptor standards.

#### 7.1.3 Administration

- Establishing a single entry "one-stop-shop" where all authorisations and permits that control waste are dealt with. An authorisation or permit will be issued, but should any of the aspects for which a site or process is permitted change, including an increase in production hazard and / or toxicity of the process, then a comprehensive re-evaluation must be done.

- Strict monitoring of adherence to any regulations set by national government departments that are applicable to waste, *inter alia* the Major Hazard Installation Regulations of the Department of Labour.
- Monitoring by an independent body. Public participation in monitoring should be made mandatory with provision for appropriate capacity building.

## 7.2 Voluntary Agreements (indirect measures)

Voluntary agreements include Responsible Care programmes, Good Neighbourly Agreements (GNA), Environmental Management Co-operation Agreements (EMCAs) and the ISO 14000 series environmental management system. These systems do not replace the legislation and regulations with which an organisation has to comply. Rather they provide a system for controlling, monitoring and improving performance over and above mandatory requirements, with a focus on prevention and continuous improvement.

For these to succeed, the following considerations will apply.

### 7.2.1 Minimum standards

- Industry may only self regulate over and above the statutory requirement or minimum requirements. The environment belongs to all who share it and so, industry must take into account others who live and work in the surrounding area.

### 7.2.2 Information

- Public disclosure should be made of any self-regulatory measures in effect and the progress made in applying these.
- Independent auditing mechanisms should be employed to verify implementation of these agreements.
- Disclosure of information is a constitutional right; therefore voluntary agreements must allow for free access to information.

### 7.2.3 Alternatives and options

- Willingness to understand and appreciate each other's needs and constraints.
- Flexibility and open-mindedness in exploring alternatives and options.
- Voluntary agreements need to be coupled with economic instruments.

## 7.3 Economic Instruments

Economic instruments include incentives and disincentives. The following considerations will apply in developing economic instruments.

### 7.3.1 Costing

- The pricing of environmental impacts must be in direct proportion to the type and quantity of waste.
- Full cost environmental accounting of products, processes and discharges must be applied in any impact assessment.
- Where charges are made for the issuing of permits, the charge should be directly related to the level of clean technology used.

### 7.3.2 Legislation

- Initiating a participative process that will lead to legislation that provides for economic incentives and disincentives.

### 7.3.3 Thresholds and standards

- The carrying capacity of the receiving medium.
- Economic incentives will be considered only after the minimum standard is achieved. The issuing of tradeable permits for emissions will not imply permission to exceed the relevant standard.
- A dynamic approach will be adopted with a view to progressive improvement in environmental quality.

### 7.3.4 Applicability

- Government departments and parastatals are not exempt from the application of economic instruments.

## 7.4 Fidelity Trust Fund

The lead agent will set up a participatory mechanism to investigate the establishment of a Fidelity Trust Fund for the province. The following considerations will apply in developing such a fund.

### 7.4.1 Process

- The process will include both national and provincial authorities.
- Consultations around the establishment of the fund should include local authorities, communities and industry.
- The need for consultation and discussion of all issues associated with such a fund.
- The advisability of a separate fund for each industry.
- The need for research to quantify some of the impacts such as the health impacts from mines.

### 7.4.2 Status

- The status of the fund as a statutory or voluntary fund.
- The inclusion of municipalities and other organs of state.

### 7.4.3 Governance and administration

- The responsibility for administering such a fund.
- Enforcement powers including the enforcement of Environmental Management Agreements.

### 7.4.4 Use of the fund

- Mechanisms to prevent the fund being used for legal fees only.
- The purpose of the fund and the criteria to be used when allocating funds.
- The payment of inter-generational costs.
- The fund's pro-active role in funding research as well as a reactive role in remediation.
- The extent of cross-subsidisation, if any, between bigger (richer) and smaller (poorer) industries.

## 7.5 Information Systems

Databases and access to their information are essential. The following elements will be taken into account.

### 7.5.1 Contents

- The database should contain information detailing amounts of waste, types, generated by whom, transported where, how disposed of, recycling options, and, in the case of hazardous wastes, the chemical composition where possible.

### 7.5.2 Access

- Public access to these databases and other relevant corporate information is crucial.
- No organisation must be allowed to withhold information that may infringe environmental rights.
- The provisions of the Promotion of Access to Information Act 2 of 2000, especially sections 36 and 37, must be taken into account.

### 7.5.3 Eco-labelling

- Initiating a participative process to develop legislation for the eco-labelling of products, which may include information on net resources used and emissions produced in the acquisition of raw materials, product manufacture, distribution, use and mode of disposal.

## 8 Time frames

The following time frames propose deadlines for the acceptance of the draft policy, putting an institutional framework and regulatory mechanisms in place and building waste management capacity in KwaZulu-Natal.

The Waste Management Policy Steering Committee will continue with its work to ensure that the policy is carried through timeously.

### 8.1 Policy

The draft policy is to be submitted to the Minister of Agriculture and Environmental Affairs' legal advisors by **31 March 2002**.

The Policy is to be finalised by **31 May 2002**.

### 8.2 Framework

The institutional framework is to be established by the **end of February 2003**. It is acknowledged that all elements of the proposed structure may not be provided for by that time.

### 8.3 Instruments

Some regulatory mechanisms are currently provided for in the Constitution and the Environment Conservation Act (No 73 of 1989). New provincial legislation should be promulgated by **April 2003**.

### 8.4 Waste reduction targets and reuse and recycle options

A waste reduction, reuse and recycle plan, with targets, should be in place by **end of December 2002**.

### 8.5 Capacity

The process should **start immediately** and follow through continuously, with the capacity of the responsible bodies being built on an ongoing basis. The staff and finances needs of the Department of Agriculture and Environmental Affairs should be adequately provided for before resources are provided to other responsible bodies.

### 8.6 Forums

Local and provincial forums should be in place by **March 2003**. It is envisaged that eventually local forums will be funded by local authorities and provincial forums by the provincial government, but that in the interim they will be voluntary.

### 8.7 Regional Offices of National Departments

The provincial government will negotiate for the assimilation of the appropriate waste management functions of relevant regional offices of national departments, in favour of the KwaZulu-Natal Department of Agriculture and Environmental Affairs, with the transfer of appropriate resources.

### 8.8 Interim Measures

The Waste Management Policy Steering Committee will address interim issues, and liaise with the Minister of Agriculture and Environmental Affairs on progress. Information will be fed back to all interested and affected parties.

Where possible, power and authority will be devolved to the most capable sphere of local government with the necessary powers.

The KwaZulu-Natal government will consult and liaise with the national government and other provinces, especially regarding the status and role of the regional offices of national departments, and issues of inter-regional transport of waste.

The KwaZulu-Natal government will be guided, in principle, by policy agreed to in the provincial consultation process.

The KwaZulu-Natal Department of Agriculture and Environmental Affairs will initiate a process of identifying the need for a high hazard waste disposal site in KwaZulu-Natal. The establishment, siting and management of a site will be addressed should such a site be deemed necessary.

## 9 Glossary

Audit	An investigation to verify the accuracy of the records being kept
Audit trail	A list of actions taken that can be tracked later and verified as accurate
Capacity building	Includes the transfer of skills, the development of abilities and the provision of human and material resources
Clean production	Involves the minimal use of resources, the design of sustainable products, the production of food in a sustainable way, and the generation of waste that is benign and returnable into the production process. It requires thinking of the production of goods and serves as part of a life cycle that includes that extraction and processing of raw materials, product design, consumption, and disposal (in which the product eventually becomes raw material).
Clean technology	Clean technologies are new industrial processes or modifications in existing processes aimed at reducing the impact on the environment and reducing the consumption of energy and raw material.
Effluents	Liquid industrial waste
EIA	Environmental Impact Assessment
Emission	Waste that is discharged, usually to the atmosphere
Environmental justice	Those actions and policies which <ul style="list-style-type: none"> <li>• redress past and present environmental injustice</li> <li>• take account of the need to protect and create employment that is not hazardous</li> <li>• recognise that workers can refuse work that is harmful to human health or the environment</li> <li>• ensure that everyone is able to make environmental or health hazards known without fear of the consequences</li> <li>• ensure equitable representation and participation of all with particular concern for marginalized groups.</li> </ul>
Environmental Advisory Forums	Multi-stake holder forums representing government, NGOs, CBOs, labour, business and industry set up at provincial, regional and local spheres for the purpose of advising the relevant sphere of government on environmental issues
Full cost environmental accounting	The calculation of the cost of any economic activity that includes the cost of the environmental impact of raw materials, production and distribution as well as the cost of environmental protection measures, waste avoidance minimisation, reduction, storage and safe disposal
H (Hazardous waste) site	A containment landfill, designed specifically for the disposal or co-disposal of hazardous waste.
Inter governmental	Inter governmental refers to the inter-relationships between national, provincial and local spheres of government
Landfill site	A land based waste disposal site which has been constructed and is managed according to approved standards and criteria

Mass balance	Equates material coming into a process to materials going out; by definition, matter in must equal matter out. (Energy is accounted for in an energy balance. The two are often combined in a heat and mass balance.)
Mediation	Interposing between parties in conflict as a friend of each with a view to resolving the conflict amicably
Receiving environment / medium	The environment which receives waste; air, land or water
Retro-fitting	The later installation of machinery and or equipment in an established production process, typically to improve the process and reduce waste
Risk averse and cautious approach	A risk-averse and cautious approach takes into account the limits of current knowledge about the consequences of decisions and actions.
Safe disposal	Disposal that takes a risk averse and cautious approach recognising the limits of current knowledge about the social and environmental consequences of decisions or actions. Waste of incompletely known composition or hazard is to be classified and treated on the basis of a worst-case scenario.
SEA	Strategic Environmental Assessment
SIA	Social Impact Assessment
Sphere of government	National, provincial, or local government body as defined in the Constitution (Act 108 of 1996)
State organs	All those institutions which are appointed by, funded by, and responsible to, government, including departments and parastatals
Sustainable development	The integration of social, economic and environmental factors into planning, implementation and decision-making so as to ensure that development serves present and future generations
Tradeable permits	Permits issued to dischargers under a multi-source emission limit which in total add up to that limit, and which may be traded within a plant, within a firm or among different firms
Whistleblowers	Persons who, or organisations which, draw attention to contraventions of regulations or standards