



unite the people of SA in working towards a society where all people have sufficient food, clean air and water, decent homes and green spaces in their neighbourhoods that will enable them to live in spiritual, cultural and physical harmony with their surroundings.

This is to be achieved through a paradigm of sustainable development based on integrated and coordinated environmental management that addresses;

- people's quality of life and their daily living and working environments;
- equitable access to land and natural resources;
- the integration of economic development, social justice and environmental sustainability;
- more efficient use of energy resources;
- the sustainable use of social, cultural and natural resources; and
- public participation in environmental governance.

The principles for environmental management in this policy are the fundamental premises the Government uses to apply, develop and test policy and subsequent actions including decision-making, legislation, regulation and enforcement.

This framework has been followed by the promulgation of a number of key pieces of environmental legislation that have gone a long way towards establishing a coherent framework for environmental governance in South Africa.

### The NEMA

Within a year of the publication of the environmental management policy, the DEAT developed a legislative framework for its implementation through namely the (Act 107 of 1998).



NEMA was promulgated on 27 November 1998 (Government Gazette 19519) and commenced on 29 January 1999 (Proclamation R8, Government Gazette 19703).

### The Central Pillars of NEMA are:

#### *Quality in environmental decision-making*

Principles and procedures for improving the quality of environmental decision-making include:

- the environmental management principles in Chapter 1 of the Act, that apply to the actions of all organs of state that may significantly affect the environment;
- the conciliation procedure in chapter 4 of the Act that provides a variety of mechanisms for referring a disagreement regarding the protection of the environment to conciliation; and
- the integrated environmental management procedures in Chapter 5 of the Act.

#### *Cooperative governance in the environmental sector*

Cooperative governance mechanisms in NEMA include:

- the Committee for Environmental Coordination (CEC), an interdepartmental

committee responsible for promoting integration and coordination of environmental functions by the relevant organs of state;

- Environmental Implementation Plans (EIPs) and Environmental Management Plans (EMPs) to be compiled by listed departments and provinces. The purpose of the EIPs and EMPs is to coordinate and harmonise the environmental policies, plans, programmes and decisions of various departments (at national, provincial and local level) whose functions may affect the environment, or whose powers and duties are aimed at managing the environment.

#### *Role of civil society in environmental governance*

NEMA creates a framework for facilitating the role of civil society in environmental governance, including:

- the National Environmental Advisory Forum (NEAF), which advises the Minister, among other things, on appropriate methods of monitoring compliance with the principles in section 2 of the Act, and

- the Environmental Management Cooperation Agreements, that provide a mechanism for the Minister, every MEC and municipality to enter into an agreement with any person or community for the purpose of promoting compliance with the principles in section 2 of the Act;
- the provisions on protection of

whistle-blowers that protect the public from prejudice or harassment for disclosing information on environmental risk, in good faith, and using the required procedures.

*Constitutional imperative to respect, protect, promote and fulfil the environmental right in the Bill of Rights.*

Mechanisms in the Act to achieve

this include:

- the duty of care that requires anyone that causes, has caused or may cause significant pollution or degradation of the environment, to take reasonable measures to prevent such pollution or degradation from occurring, continuing or recurring;
- provisions that protect workers from prejudice or harassment for refusing to do environmentally hazardous work; and
- procedures for the control of emergency incidents, including a major emission, fire or explosion that may endanger the public, or lead to potentially serious pollution of, or detriment to the environment.

Following the White Paper and NEMA, the Government was able to forge ahead and in 2000, published the White Paper on Integrated Pollution Control Waste Management. This introduced the concept of shifting management approaches from handling the impact at the 'end of the pipe' to instituting cleaner production up front.

Within the framework offered by NEMA and the integrated pollution and waste management policy, a number of pieces of legislation had been submitted to Parliament by March 2004. They include the following:

### **National Environmental Management: Amendment Act.**

This First amendment to NEMA deals with compliance and enforcement and specifically with the provision of powers to environmental management inspectors to enforce environmental legislation.

### **National Environmental Management: Second Amendment Bill.**

This second Amendment Bill on environmental impact management was passed



South Africa was the first country in the world to have State of the Environment Reports (SOER) for all three levels of government - municipal, provincial and national

by both houses of Parliament (the National Assembly and the National Council of Provinces) and by February 2004 was awaiting the President's assent and signature. An initial set of draft regulations in terms of this amendment have since been gazetted for public comment.

### **National Environmental Management: Air Quality Bill.**

By the end of February 2004, the Bill had been adopted by the National Council of Provinces and had been referred to the National Assembly for final consideration and voting. It is anticipated that this Bill will be promulgated

before the end of 2004.

**Environment Conservation: Amendment Act.** This Act dealing with the permitting of waste facilities, product bans and the use of economic instruments for waste management was assented to by the President in February 2004. These changes now allow for improved control of pollution and waste.

DEAT's intention is to publish National Environmental Management: Waste Management Bill for public comment by the end of the 2004/2005 financial year. This will complete a suite of

legislation that will ensure that a comprehensive legal framework is in place to ensure that South Africa's environment and its people are protected from harm

## **STRATEGIC APPROACHES**

In the area of 'brown issues' DEAT seeks to protect, enhance and maintain environmental quality through legislative and other means in order to give effect to the right of all South Africans to an environment that is not harmful to their health and well-being. In this regard, four main strategic objectives guide its work. These in turn give rise to the programme of work described below:

### **1. The potential negative environmental impacts of all significant new developments are mitigated, managed and/or controlled**

This strategic objective guides the implementation and on-going review of the Environmental Impact Management programme and its associated legislation. In order to achieve greater effectiveness in this work, systems are currently being established for charging service fees for the delivery of an efficient environmental impact management system. In addition, work is underway to establish a computerised register and database of EIAs.

### **2. Increased compliance with environmental quality and protection legislation and authorisations**

With the promulgation of the legal framework described above, it has now become possible to establish a comprehensive environmental compliance monitoring and enforcement capacity in Government. The Chief Directorate Regulatory Services, which was established in 2003, is





the custodian at this work. It intends to use the NEMA First Amendment described above, to establish a country wide network of environmental law enforcers located in all three spheres of government, whose collective work will ensure that polluters pay.

### **3. Reduced release of prioritised waste streams into the environment and/or landfills.**

Government follows an approach to waste management that aims at ensuring that in all sectors, the approach to waste, is first to reduce it, through the introduction of 'clean' and improved technology; secondly to reuse the waste through recycling initiatives of various kinds; and only in the final instance to dispose of it

permanently to landfill or to sewer (in the case of liquid waste).

In implementing this cradle to grave, waste manifest system, the department has identified key waste streams and activities that require regulation and intervention.

For example, work is underway to promulgate regulations that will phase out the use of asbestos in SA, in line with a Cabinet decision made some years ago. Likewise various studies are being undertaken to look at the effect of chemicals such as methyl bromide on the environment and to identify safer alternatives with which it could be substituted. (Methyl bromide is a highly toxic chemical used by farmers to fumigate the soil against nematodes and other

pests, and is a serious contributor to ozone depletion.) Other examples include DEAT's participation in a regional initiative to eradicate stockpiles of persistent organic pollutants by physically removing them from the areas in which they are kept and disposing of them safely and permanently.

This work is increasing in both volume and intensity, and as it proceeds, it is essential that it is characterised by the full participation of all involved parties and particularly producer and user groups. In this context, initiatives such as the plastic bag initiative and the full participation of all stakeholders in the industry in coming together with government to form a Section 21 Company, that will champion the cause of both waste reduction and job cre-

# Thor Chemicals – A Case Study in Environmental Injustice.

In the late 1980s, various industries in the country were either considering or implementing plans to import huge quantities of toxic waste to South Africa. In the context of sanctions, it seemed an easy source of considerable money.

One of these companies was Thor Chemicals, which was extracting mercury by incineration from waste coming from all over the world and especially the United States. It built up vast stockpiles of highly toxic mercury waste. Thor allegedly intended to recycle the mercury, but most of it seems to have just piled up. Late in 1989, environmental activists discovered large quantities of mercury leaking from Thor Chemicals' plant in Cato Ridge near Durban into the Umgweni River, which registered some of the highest mercury pollution levels ever recorded, placing the health of those living in a nearby informal settlement at serious risk.

Some workers at Thor died of mercury poisoning and several others were incapacitated from exposure to mercury.

It proved a turning point. Many environmental activists, helped by the anti-apartheid movement, protested against the use of the country and its people as the world's toxic waste dumping ground. In August 1990, the then Minister of Environmental Affairs and Tourism publicly announced the banning of all toxic waste imports.

Yet within two months of this announcement, the same Minister wrote to Thor, telling managers there that this ban did not apply to them. Seven years later, a Presidential commission of Inquiry noted that "perhaps the Minister was poorly advised by officials in his Department, or he adopted a cavalier attitude to any request for a concession. Whatever the explanation, it revealed the extent of government culpability in the creation and development of the environmental problem at Thor Chemicals".

Some years later, Thor Chemicals was closed for good and only now is the site of the plant being rehabilitated.

South Africans are still counting the cost to their health from unrehabilitated mine dumps, polluting industries as well as water and soil contamination resulting from that era.

ation in the industry is particularly welcome. It is seen as providing inspiration to other producer and user groups in identified waste streams to embark upon similar initiatives.

#### **4. South Africa's international influence in respect of Environment Quality and Protection-related multilateral environmental agreements is reinforced and maintained.**

As described above, during the past decade, South Africa has become a signatory to numerous international conventions that govern various elements of global environmental management. These are described below. The challenge of implementing these conventions has been taken on

wholeheartedly by the Government and the various implementation plans and response strategies that are being devised will ensure that, South Africa implements its international obligations to the fullest extent possible.

It should also be said that although DEAT – as the signatory to the various Conventions – is the champion in Government for its implementation activities, many of the Conventions require joint and coordinated action by numerous stakeholders both inside and outside of the public sector.

This is particularly so with the United Nations Framework Convention on Climate Change (UNFCCC) that requires that all sectors of society that could be

impacted by climate change are able to assess its effects and put in place mitigation and adaption measures. Likewise, in the management of international chemicals, Departments such as Agriculture, Health and Trade and Industry have key roles to play.

#### **Waste Agreements**

In 2002 DEAT convened a Waste Summit, which produced the Polokwane Declaration. This declaration reflects a statement of commitment by all stakeholders in the waste industry to meet environmental performance targets, and has set a basis for joint action by the key players in the sector.

This development was followed in 2003 by a successful waste



The National Environmental Management: Protected Areas Bill was presented to Parliament in 2004

summit convened by the department in collaboration with the Department of Provincial and Local Government. Its aim was to address waste management challenges at the local government level. Some of the outcomes of the summit have been the development of waste service standards as well as pollution and waste guidelines for IDPs currently being developed by

DEAT.

**International Pollution and Waste Governance**

In the past decade South Africa became signatory to numerous Multilateral Agreements such as:

- United Nations Framework for Climate Change Control and the Kyoto Protocol (an

instrument strengthening the UNFCCC);

- Basel Convention governing transboundary movement of hazardous waste;
- Rotterdam Convention on Prior Informed Consent for Certain Hazardous Chemicals and Pesticides in International Trade;
- Stockholm Convention on the control of Persistent Organic Pollutants; and
- Vienna Convention on the protection of the Ozone Layer.

South Africa has already submitted its first National Communication on climate change as well as deposited instruments to ratify the Beijing Amendments of the Montreal Protocol (which in turn strengthens the Vienna Convention on ozone protection).

It has implemented the Basel Convention and is in the process of developing implementation plans for the Rotterdam and Stockholm Conventions.

**Environmental Impact Management**

Over the past decade the department, together with the provincial authorities, have been implementing a cutting-edge environmental impact management tool – the EIA. Since 1997 all new developments that could result in significant environmental pollution or degradation have been subjected to a rigorous assessment of their possible impacts. This assessment involves active public involvement and provides the Government with the necessary information to make informed decisions about developments and how their impacts can be controlled or mitigated. Given the wealth of experience that Government has gained over the years of EIA implementation, it is now in a position to fine-tune and streamline the process as well as



The National Environmental Management: Air Quality Bill replaces the outdated and ineffective 1965 air pollution legislation

explore and develop other environmental impact management tools such as strategic environmental assessments.

### **Air Quality Legislation and the Durban South Multi-Point Plan**

South Africa's air pollution laws date back to 1965. They, in turn, had been based on UK's Alkali Act, being a legislative framework developed in the late 1800s. They gave guidelines of concentrations of gases that could be allowed as emissions from individual industries, but did not take into account the collective impact of a number of clustered polluters. No EIA took air pollution into account as a consideration in development.

**The National Environmental Management: Air Quality Bill** will replace this outdated and ineffective air pollution legislation. In line with other environmental-quality related legislation (like the Water Act), the new pollution and waste legislative regime gives substance to the constitutional guarantee of environmental rights to each South African citizen. This approach ensures the holistic and integrated management of environmental quality.

The new Act will provide the basis for setting both ambient air quality and emission standards that will protect everyone's right to air quality that is not harmful to health and well-being.

Efforts to clean up the pollution

resulting from decades of neglect and abuse is addressed in a coordinated way with DEAT's national, provincial and local government partners. Some of the high-profile cases that have been addressed in 2003 and 2004 include the Minister's multi-point plan to clean up the air in the Durban South basin, a notorious pollution 'hotspot'. This has already resulted in a 40% reduction of sulphur dioxide emissions in the Durban South Basin. The establishment of a sophisticated on-line, real time air quality monitoring system has provided the scientific basis for this to happen.

Another example is the Thor Chemicals Clean Up. The department has initiated a clean





up process around the contaminated waste. Thor's owners will contribute financially to the clean-up and the department has contracted service providers to undertake the clean up.

### Specialist Enforcement Capacity

A new directorate dealing specifically with the enforcement of pollution and waste legislation was set up in September 2003. The directorate is staffed by enforcement specialists whose sole aim is to ensure compliance with the law. In the short time of its existence, it has already made its mark by facilitating the arrest of an illegal hazardous waste dumper

and bringing a major air polluter into full compliance with its permit. These and other achievements have prompted the media to refer to the directorate as the 'Green Scorpions'.

### CHALLENGES AHEAD

The past decade has seen huge strides taken in the establishment of an effective and comprehensive environmental management system in South Africa. A policy is in place, the bulk of the regulatory framework has been devised and is nearing completion and movement has been made in the establishment of a resource capacity to implement the system.

However, major challenges lie ahead both within the governmental system and in society at large.

Because environmental management is a function that has been developed since 1994, the Government has a limited and inadequate budget to handle it, which must be expanded if work is to be carried out effectively. This is not only so at a national Government level, but also in the provincial and local spheres of government, where the bulk of the implementation of environmental management, including EIA and air quality management take place.

In terms of the constitution, environment is a concurrent function that is shared between the national and the provincial spheres of government and with specific elements of its management being allocated to the local government. This constitutional dispensation requires that all spheres of government work in close cooperation with each other, if environmental management is to take place effectively. A great deal of work has taken place over the past decade to begin to achieve this. However, much more must be done if the challenge of implementation of the new environmental legislation is to be fully met.

Likewise, successful implementation will also require more streamlined relationships with industry, labour and other key stakeholders in civil society in order that there is a unified national intention to ensure that South Africa as a country manages its environment in the most responsible way and according to best practice principles.

These challenges of implementation will set the agenda for the focus of environmental management over the next coming

decade. The progress thus far is already a reflection of the huge commitment and enormous quantity of work that all stake-

holders in the environmental management sector have undertaken in the past decade.



The 2002 plastic bag agreement was the most high profile of DEAT's waste minimisation initiatives because of the extent of public involvement and debate. In essence, it challenged the growing 'throw-away' culture prevalent that threatens sustainable development.

By setting standards for the thickness of plastic bags and ensuring a voluntary system of charging by large retailers until a mandatory levy could be instituted on plastic bags, the costs of waste were for the first time ever, made visible to the public at large.

The initiative reduced the amount of plastic bags littering our landscape, filling landfills and choking rivers and animals. It also brought home to consumers the extent of their input into the plastic waste stream and vividly brought home the 'polluter pays' principle.

As with the plastic bag agreement, specific waste streams have been identified for stricter control with the aim of minimising pollution and reducing the depletion of scarce non-renewable resources. Other identified waste streams that are receiving immediate attention from the department, are tyres and glass. It is encouraging to note that in these two areas, the industries themselves have taken the initiative to put plans in place to address their waste streams. Memoranda of Understanding around reuse and minimisation of their waste are likely to be signed with Government during 2004.