
GENERAL NOTICE

NOTICE 354 OF 2002

NATIONAL ENVIRONMENTAL MANAGEMENT ACT, 1998 (ACT NO. 107 OF 1998)

ENVIRONMENTAL IMPLEMENTATION PLANS AND ENVIRONMENTAL MANAGEMENT PLANS UNDER
SECTION 15 (1) OF THE NATIONAL ENVIRONMENTAL MANAGEMENT ACT, 1998 (ACT NO. 107 OF
1998)

I, Valli Moosa, Minister of Environmental Affairs and Tourism, in terms of section 15 (1) and Schedule 2 of the National Environmental Management Act, 1998 (Act No. 107 of 1998), hereby promulgate the First Edition Environmental Implementation for the Department of Environmental Affairs and Tourism.

TABLE OF CONTENTS

List of Acronyms.....	6
EXECUTIVE SUMMARY.....	8
CHAPTER ONE: OVERVIEW OF POLICY AND LEGISLATIVE MANDATE.....	30
1.1 Purpose of Environmental Management and Implementation Plan.....	30
1.2 Policy and legislative mandate.....	30
1.2.1 Over-arching context.....	30
1.2.2 Policy mandate.....	31
1.2.3 Legislative mandate.....	32
1.3 Vision, Mission and Focus Areas.....	33
1.3.1 Vision.....	33
1.3.2 Mission.....	33
1.3.3 Priority focus areas.....	33
1.4 Structure of the Department.....	33
1.4.1 Branch: Environmental Quality and Information Management.....	33
1.4.2 Branch: Biodiversity and Heritage.....	34
1.4.3 Branch: Marine and Coastal Management.....	34
1.4.4 Branch: Tourism.....	34
1.5 Environmental Management Functions of DEAT.....	34
1.5.1 Environmental Quality and Protection.....	34
1.5.2 Biodiversity and Heritage.....	35
1.5.3 Marine and Coastal Management.....	36
1.5.4 Environmental Planning and Co-ordination.....	37
1.6 Environmental Impacting Priority Functions of DEAT.....	37
1.6.1 Marine and Coastal Management.....	37
1.6.2 Tourism.....	38
CHAPTER TWO: INSTITUTIONAL ARRANGEMENTS.....	41
2.1 Framework for Co-operative Governance.....	41
2.2 External Arrangements for Co-operative Governance.....	41
2.2.1 Institutional relationships with national departments.....	41
2.2.2 Institutional relationships with provincial counterparts.....	42
2.2.3 Structures for interaction with national departments and provinces.....	43
2.2.4 Institutional relationships with local government.....	46
2.3 Procedures and Mechanisms for Co-operative Governance.....	50
2.4 Capacity for Co-operative Governance.....	50
2.4.1 Co-operative governance capacity gaps.....	50
2.4.2 Capacity building programmes.....	51
2.5 Summary of Institutional Mechanisms for Co-operation.....	52
CHAPTER THREE: ENVIRONMENTAL MANAGEMENT PLAN.....	53
3.1 Environmental Quality and Protection.....	53
3.1.1 Integrated Pollution Prevention and Waste Management.....	53
3.1.2 Atmospheric Protection and Chemicals Management.....	57

3.1.2.1 Air Quality Management.....	57
3.1.2.2 Global Climate Change	60
3.1.2.3 Hazardous Substance Management and Pollutant Information.....	64
3.1.3 Environmental Impact Management.....	69
3.2 Biodiversity and Heritage.....	72
3.2.1 Biodiversity Management.....	72
3.2.2 Cultural and Natural Resource Management.....	75
3.3 Marine and Coastal Management.....	78
3.3.1 Management of Non-Consumptive Use of Marine Living Resources.....	79
3.3.2 Management of Coastal Resources.....	81
3.3.3 Management of Marine Pollution.....	85
3.3.4 Antarctica and Islands.....	89
3.4 Cross-Cutting and Support Functions.....	94
3.4.1 Environmental Information and Reporting.....	94
3.4.2 Law reform, Planning and Conciliation.....	96
CHAPTER FOUR: ENVIRONMENTAL IMPLEMENTATION PLAN.....	101
4.1 Introduction.....	101
4.2 Consumptive Use of Marine Living Resources.....	101
4.2.1 Policies and legislation to manage environmental impacts.....	101
4.2.2 Compliance with laws to manage environmental impacts.....	103
4.2.3 Constraints and limitations with respect to ensuring compliance.....	105
4.2.4 Programmes to manage environmental impacts.....	105
4.3 Resource Development (Mariculture).....	106
4.3.1 Policies and legislation to manage environmental impacts.....	106
4.3.2 Compliance with laws to manage environmental impacts.....	106
4.3.3 Constraints and limitations with respect to ensuring compliance.....	108
4.3.4 Programmes to manage environmental impacts.....	109
4.3.5 Co-operative governance arrangements.....	109
4.4 Tourism.....	110
4.4.1 Policies and legislation to manage environmental impacts.....	110
4.4.2 Compliance with laws to manage environmental impacts.....	111
4.4.3 Constraints and limitations with respect to ensuring compliance.....	113
4.4.4 Programmes to manage environmental impacts.....	114
4.4.5 Co-operative governance arrangements.....	114
CHAPTER FIVE: PROPOSALS FOR INTEGRATED ENVIRONMENTAL MANAGEMENT.....	115
5.1 Introduction	115
5.2 DEAT Specific Integrated Environmental Management (IEM) Proposals.....	115
CHAPTER SIX: PERFORMANCE MONITORING.....	116
6.1 System for Monitoring the Performance of the DEAT EIMP.....	116
6.1.1 Internal arrangements for co-ordination and integration.....	116
6.1.2 DEAT's performance monitoring system.....	116
6.2 Plan for Monitoring Compliance of all Scheduled Departments EIP/EMP.....	117
6.3 Environmental Indicators.....	118
6.4 Annual National Report on Sustainable Development.....	119

LIST OF ACCRONYMS

AMC	Antarctica Management Committee
APCM	Atmospheric Protection and Chemicals Management
APELL	Awareness Preparedness for Emergencies at Local Level
ATCM	Antarctic Treaty Consultative Meetings
ATS	Antarctic Treaty System
CBD	Convention on Biological Diversity
CBNRM	Community Based Natural Resource Management
CBO	Community Based Organisation
CCD	United Nations Convention to Combat Desertification
CEC	Committee for Environmental Co-ordination
CEE	Comprehensive Environmental Evaluation
CEP	Committee for Environmental Protection
CFC	Chlorofluorocarbon
CITES	Convention on International Trade in Endangered Species of Wild Fauna and Flora
COMPARE	Criteria and Objectives for Marine Protected Area Evaluation
COP	Conference of the Parties
CSD	Commission on Sustainable Development
DAWF	Department of Water Affairs and Forestry
DDP	Decentralised Development Planning
DEAT	Department of Environmental Affairs and Tourism
DECAS	Department of Environment, Conservation and Sport (Western Cape)
DME	Department of Mineral and Energy Affairs
DOH	Department of Health
DoT	Department of Transport
DPW	Department of Public Works
DTI	Department of Trade and Industry
ECA	Environmental Conservation Act
EEU	Environmental Education Unit
EEZ	Exclusive Economic Zone
EIA	Environmental Impact Assessment
EIM	Environmental Impact Management
EIMP	Environmental Implementation and Management Plan
EIP	Environmental Implementation Plan
EMCA	Environmental Management Co-operation Agreement
EMP	Environmental Management Plan
ENPAT	Environmental Potential Atlases
ESMHM	Standing Committee on Environmentally Sound Management of Hazardous Materials
FAO	Food and Agricultural Organisation
GIS	Geographic Information System
HCFC	Hydro chlorofluorocarbon
HDI	Historically Disadvantaged Individual
HWM	Hazardous Waste Management
IDP	Integrated Development Plan
IDSS	Information and Decision Support System
IPCS	Intergovernmental Programme on Chemical Safety
IPPWM	Integrated Pollution Prevention and Waste Management
IPWM	White Paper on Integrated Pollution and Waste Management
IUCN	International Union for the Conservation of Nature
MCS	Monitoring, Control and Surveillance System
MEC	Minister of Executive Council
MINMEC	Minister and MEC Committee for Environmental Affairs and Tourism
MINTEC	Technical Committee for MINMEC Environment
MIPTEC	Technical Committee for MINMEC Tourism
MITT	Municipal Infrastructure Task Team
MPA	Marine Protected Area
MPA	Marine Protected Areas
MTEE	Medium Term Expenditure Estimates
MTSF	Medium Term Strategic Framework
NDA	National Department of Agriculture

NEMA	National Environmental Management Act
NGO	Non Governmental Organisation
NSOER	National State of the Environment Report
NSSD	National Strategy for Sustainable Development
NWMS	National Waste Management Strategy
ODS	Ozone-depleting substance
ORV	Off-road vehicle
PATI	Priority Area for Tourism Infrastructure Development
PIC	Convention on Prior Informed Consent
PEIMC	Prince Edward Islands Management Committee
PIWM	Policy on Integrated Waste Management
POP	Persistent Organic Pollutants
PPP	Public Private Partnership
RETOSA	Regional Tourism Organisation of South Africa
SALGA	South African Local Government Association
SANAP	South African National Antarctic Programme
SANCOR	South African National Committee on Oceanic Research
SANDF	South African National Defence Force
SAPS	South African Police Service
SCA	Sensitive Coastal Area
SDI	Spatial Development Initiative
SEA	Strategic Environmental Assessment
SIC	Standard International Codes
SMME	Small, Medium and Micro Enterprise
TBCSA	Tourism Business Council of South Africa
TBCSA	Tourism Business Council of South Africa
TFCA	Transfrontier Conservation Area
UNCED	United Nations Conference on Environment and Development
UNCLOS	United Nations Law of the Sea Convention
UNESCO	United Nations Educational, Scientific and Cultural Organisation
UNFCCC	United Nations Framework Convention on Climate Change
WPEM	White Paper on Environmental Management Policy

DEAT ENVIRONMENTAL IMPLEMENTATION AND MANAGEMENT PLAN

EXECUTIVE SUMMARY

1. OVERVIEW OF DEAT VISION, MISSION AND STRUCTURE

1.1 VISION AND MISSION AND FOCUS AREAS

Vision

Leading environmental management and tourism in the interest of sustainable development for all

Mission

To contribute to the improvement of the quality of life of all South Africans by:

- Promoting the sustainable development, utilisation and protection of our natural and cultural resources
- Establishing responsible tourism that ensures environmental sustainability and which contributes to job creation and a better quality of life
- Harnessing the skills, experience and knowledge of the environment of all South Africans
- Fostering equitable access to the benefits derived from our natural and cultural resources
- Empowering the South African public, communities and organisations through participation, environmental education, capacity building, research and information services
- Working together with all relevant stakeholders and spheres of government in the spirit of good governance
- Ensuring that all international participation and obligations are undertaken in the context of South Africa's environmental policies and principles.

Priority Focus Areas

Focus Area 1: Create the conditions for responsible tourism growth and development

Focus Area 2: Promote the conservation & development of natural and cultural resources for sustainable use

Focus Area 3: Protect and enhance the quality and safety of the environment

Focus Area 4: Provide accessible environmental and tourism information for sound planning and decision-making.

1.2 STRUCTURE OF THE DEPARTMENT

The core functions of DEAT are organised into four Branches.

- Environmental Quality and Information Management
- Biodiversity and Conservation
- Marine and Coastal Management
- Tourism.

1.3 CORE FUNCTIONAL AREAS AND KEY OBJECTIVES

1.3.1 OVERVIEW OF CORE FUNCTIONAL AREAS

Table: Overview of core functional areas

FUNCTIONS INVOLVING MANAGEMENT OF THE ENVIROMENT			
Quality & Protection	Biodiversity & Heritage	Marine and Coastal Management	Tourism
<ul style="list-style-type: none"> Implement the Integrated Pollution and Waste Management Policy for South Africa Improve waste service provision and recycling by municipalities Initiate community waste and pollution management initiatives Develop one integrated pollution and waste management permitting and licensing system Service and implement international Conventions 	<ul style="list-style-type: none"> Implement the White Paper on the Conservation and Sustainable Use of South Africa's Biological Diversity Establish a national system to manage biodiversity and conservation areas Regulate utilisation of biological diversity Provide biodiversity information for optimal utilization Implement International Conventions 	<ul style="list-style-type: none"> Implement the White Papers on: Sustainable Coastal Development; Marine Fisheries Policy; and Conservation of Biodiversity Promote sound use of non-consumptive resources Control and reduce marine pollution 	NA
FUNCTIONS WITH AN IMPACT ON THE ENVIROMENT			
Quality & Protection	Biodiversity & Heritage	Marine and Coastal Management	Tourism
NA	NA	<ul style="list-style-type: none"> Implement the White Paper on a Marine Fisheries Policy for South Africa Transform and stabilise the fishing industry Develop new and under-utilised marine resources 	<ul style="list-style-type: none"> Implement the White Paper on The Development and Promotion of Tourism Develop and coordinate tourism policy Promote coordination and collaboration amongst stakeholders Ensure international and regional institutional linkages
CROSS-CUTTING AND SUPPORT FUNCTIONS			
<ul style="list-style-type: none"> Develop and implement an Environmental Capacity Building strategy Establish a system for consolidated and integrated environmental reporting for South Africa Develop a coherent system across government for the planning and co-ordination of sustainable development Give effect to legislative requirements in the policies on coastal management, biodiversity and pollution and waste management 			

2. CO-OPERATIVE GOVERNANCE

This section provides an overview of institutional arrangements to facilitate co-ordination and co-operation, both internally and externally.

2.1 EXTERNAL ARRANGEMENTS FOR CO-OPERATIVE GOVERNANCE

The Constitution has created the framework for environmental governance in South Africa, by:

- Creating the right to an environment that is not harmful to health and well-being
- Balancing the right to have the environment protected, with an emphasis on promoting valid economic and social development
- Allocating environmental functions to a wide range of government agencies, in all spheres
- Requiring co-operation between government agencies and spheres.

The Department of Environmental Affairs and Tourism (DEAT) thus share the environmental function with many departments, across all spheres of government. As lead agent in environmental governance, DEAT is responsible for:

- Establishing national environmental norms and standards
- Ensuring compliance with national policy, laws, norms and standards on environmental management
- Establishing procedures to review the environmental impacts of all government policies, plans and programmes
- Ensuring compliance with environmental norms and standards
- Facilitating co-ordination of environmental functions of organs of state.

A key objective of the National Environmental Management Act is to establish institutions that promote co-operative environmental governance, and procedures for co-ordinating environmental functions exercised by all organs of state. The lead agent role of the Department is primarily effected through these institutions and co-operative governance procedures, as described below.

2.1.1 INSTITUTIONS

Committee for Environmental Co-ordination (CEC)

The Committee is established in chapter 2 of NEMA, and consists of the Directors-General of 10 national departments, the Heads of Department of Provincial Environmental Departments and representation from organised local government. It is chaired by the Director-General of the Department of Environmental Affairs and Tourism and meets quarterly. Functions of the CEC include investigating and making recommendations on:

- Harmonisation of environmental functions
- The assignment and delegation of environmental functions
- Environmental implementation and management plans submitted by scheduled departments
- Single point entry system for authorisations concerned with environmental protection
- Application of integrated environmental management
- Compliance with environmental management principles (in chapter 2 of NEMA) Law reform and compliance with environmental management principles

The CEC is becoming a critical structure for government co-ordination on high profile environmental initiatives, including the National Strategy for Sustainable Development, preparations for the 10th Session of the United Nations Commission on Sustainable Development, and activities under various other international environmental instruments.

MINTEC

MINTEC is a structure set up to facilitate co-ordination between the National Department of Environmental Affairs and Tourism, and Provincial environmental departments. Three Working Groups have been established, on:

- Biodiversity and heritage
- Impact management (including pollution and waste management)
- Sustainable development (including Agenda 21 implementation, environmental monitoring and reporting, and environmental capacity building)

2.1.2 PROCEDURES AND MECHANISMS FOR CO-OPERATIVE ENVIRONMENTAL GOVERNANCE AND SUSTAINABLE DEVELOPMENT

The Department has conceptualised, and is implementing a coherent and strategic process of planning for co-operative environmental governance, and setting and monitoring of targets for sustainable development. Key components of this system include:

- Co-ordination of environmental functions across all spheres of government. This is achieved through the Environmental Implementation and Management Plans, provided for in chapter 3 of NEMA

- Setting of targets for sustainable development, in the National Strategy for Sustainable Development, currently being prepared as part of South Africa's commitment to implementing Agenda 21
- Monitoring of performance on sustainable development targets by means of the Annual Performance Report on Sustainable Development and annual reports on Environmental Implementation and Management Plans
- Integration of environmental targets in local government plans.

Significant progress has been made on each:

Co-ordination of environmental functions: The Environmental Implementation and Management Plans are central to the system that promotes co-operative governance. Their purpose is to co-ordinate and harmonise the environmental policies, plans and programmes of organs of state, and to provide a basis for monitoring performance on environmental sustainability targets. Scheduled departments whose activities impact on the environment, and provinces must prepare an Environmental Implementation Plan (EIP). Scheduled departments whose activities involve the management of the environment must prepare an Environmental Management Plan (EMP). All plans must be submitted to the CEC by the end of March 2001. By the end of 2000, the following EIPs and EMPs will have been evaluated by the CEC:

- Department of Land Affairs
- Department of Defence
- Department of Minerals and Energy
- Department of Housing
- Department of Environmental Affairs and Tourism

Setting targets for sustainable development: As part of its commitment to implementing Agenda 21, South Africa is preparing a National Strategy for Sustainable Development (NSSD), in time for the 10th Session of the United Nations Commission on Sustainable Development in 2002. The Department is presently co-ordinating the process, and will draw on the active participation of other government departments, industry and civil society groups. The NSSD provides the opportunity to:

- Strengthen and build upon existing processes towards sustainable development by collating and reviewing our current policies and programmes towards sustainable development, identifying weaknesses and gaps, and identifying priority areas of action
- Clearly demonstrate how sustainable development policies and programmes are contributing to a better way of life for South Africa. The NSSD is an opportunity to demonstrate and inform the linkages between the management of environmental resources and poverty alleviation, job creation and human health and well-being.

Monitoring performance on sustainable development targets: Key mechanisms for performance monitoring include the Annual Performance Report on Sustainable Development (in terms of Section 26 of NEMA); annual reports by scheduled departments on implementation of EIPs & EMPs; and reports to the UN Commission on Sustainable Development.

Integration of environmental targets in local government plans: All spheres of government are responsible for environmental management functions. Local governments role in this respect, is described in both the Constitution and the Municipal Systems Bill as providing environmentally sustainable service delivery and promoting a safe and healthy environment within the municipal area. In practice, this means that local government is responsible for:

- Implementing the environmental policies, plans and programmes of national and provincial government
- Ensuring alignment between local government Integrated Development Plans (IDPs) and Provincial Environmental Implementation Plans
- Ensuring that IDPs comply with NEMA principles

The Department is developing a support programme that will provide environmental technical expertise to local government thereby ensuring that local governments have the necessary capacity to:

- Analyse the economic potential and sensitivity of environmental resources within the municipal area
- Assess the impacts of development activities on the environment
- Set the necessary targets and objectives for environmentally sustainable service delivery.

2.1.3 CO-OPERATIVE GOVERNANCE CAPACITY GAPS

In general, funds and personnel are not sufficient. Programmes are supplemented by donor funds and are being used to outsource primary functions. There are a number of structures and programmes, some led by DEAT and some requiring the participation of DEAT personnel. However, because of the limited numbers of personnel, it is not feasible for DEAT to participate fully in all these structures and programmes. An audit of

co-operative governance structures and programmes is needed to inform the streamlining and integration of multiple, often over-lapping institutional arrangements.

2.1.3 CAPACITY BUILDING PROGRAMMES TO STRENGTHEN CO-OPERATIVE GOVERNANCE

Local government capacity building: The Department is developing a support programme that will provide environmental technical expertise to local government thereby ensuring that local governments have the necessary environmental management capacity.

This capacity building programme will be implemented in 2001/02.

Competency profiling workshops: These workshops will begin to address the need for clarification of national, provincial and local environmental competencies. A skills audit of national personnel will be part of this exercise which is to be completed in 2001.

3. POLICY AND LEGISLATIVE FRAMEWORK

3.1 OVERVIEW OF POLICIES, LAWS AND CONVENTIONS

3.1.1 SOUTH AFRICAN ENVIRONMENTAL MANAGEMENT POLICIES AND LAWS APPLICABLE TO DEAT

Table: South African environmental management policies and laws applicable to DEAT

QUALITY AND PROTECTION	BIODIVERSITY AND HERITAGE	MARINE AND COASTAL MANAGEMENT	TOURISM
GENERAL POLICY			
White Paper on Environmental Management Policy (April 1999)			
SPECIFIC POLICY			
Policy on Integrated Pollution and Waste Management (2000)	Policy on Conservation and Sustainable Use of South Africa's Biological Biodiversity (1997)	Policy for Sustainable Coastal Development in South Africa (2000) Marine Fisheries Policy for South Africa (1997)	Policy on Development and Promotion of Tourism in South Africa (1996)
GENERAL LEGISLATION			
<i>National Environmental Management Act (107 of 1998)</i> Principles Conflict management procedures Integrated environmental management provisions Access to information; duty of care; emergency incidents Environmental management co-operation agreements			
<i>Environmental Conservation Act (73 of 1989)</i> <ul style="list-style-type: none"> Waste Management Regulations Environmental Impact Assessments 	<ul style="list-style-type: none"> Protected Natural Env. Special Nature Reserves 	<ul style="list-style-type: none"> Environmental Impact Assessments 	<ul style="list-style-type: none"> Environmental Impact Assessments
SPECIFIC LEGISLATION			
<ul style="list-style-type: none"> NEMA Amendment Air Pollution Prevention Act (45 of 1965) 	<ul style="list-style-type: none"> NEMA Amendment World Heritage Convention Act (1999) 	<ul style="list-style-type: none"> NEMA Amendment Marine Living Resources Act (18 of 1998) Regulations Regarding Activities in Various Sensitive Coastal Areas (Notices of 1996 and 1998) Antarctica Treaties Act (60 of 1996) General Policy for the Control of Off-Road Vehicles in the Coastal Zone (Notice 858 of 29 April 1994) Sea Fisheries Act (12 of 1988) Marine Pollution Act (Control and Liability) (6 of 1981) 	

QUALITY AND PROTECTION	BIODIVERSITY AND HERITAGE	MARINE AND COASTAL MANAGEMENT	TOURISM
		<ul style="list-style-type: none"> ▪ Dumping at Sea Control Act (73 of 1980) ▪ Sea Birds and Seals Protection Act (46 of 1973) ▪ Sea-Shore Act (21 of 1935) 	

3.1.2 INTERNATIONAL CONVENTIONS APPLICABLE TO DEAT

Table: International conventions applicable to DEAT

QUALITY AND PROTECTION	BIODIVERSITY AND HERITAGE	MARINE AND COASTAL MANAGEMENT	TOURISM
<ul style="list-style-type: none"> ▪ Agenda 21 – Rio Convention ▪ Convention for the Protection of the Ozone Layer ▪ Convention on Prior Informed Consent (PIC) ▪ Convention on the Control of Trans-Boundary Movements of Hazardous Wastes and Disposals (Basel Convention) ▪ Kyoto Protocol ▪ Montreal Protocol on Substances that Deplete the Ozone Layer ▪ Persistent Organic Pollutants (POP's) ▪ United Nations Framework Convention on Climate Change (UNFCCC) 	<ul style="list-style-type: none"> ▪ Biosafety Protocol ▪ Convention on Biological Diversity (CBD) ▪ Convention on the Conservation of Migratory Species of Wild Animals (Bonn Convention) ▪ Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) ▪ Convention on Wetlands (Ramsar Convention) ▪ United Nations Convention to Combat Desertification (CCD) ▪ World Heritage Convention 	<ul style="list-style-type: none"> ▪ Agreement for the Implementation of the Provisions for UNCLOS Relating to Management and Conservation of Straddling Fish Stocks and Highly Migratory Fish Stocks ▪ Antarctic Treaty ▪ Convention on Biological Diversity in Marine and Coastal Habitats ▪ Convention on Biological Diversity: Jakarta Mandate (CBD) ▪ Convention on the Prevention of Marine Pollution by Dumping Wastes and Other Matters (London Convention) ▪ FAO Conduct of Responsible Fishing ▪ MARPOL: Particularly Sensitive Sea Areas ▪ Protocols under the Abidjan and Nairobi Conventions/ SADC Protocol ▪ UNESCO: Biosphere Reserves ▪ United National Law of the Sea Convention (UNCLOS) ▪ World Heritage Sites 	<ul style="list-style-type: none"> ▪ Agenda 21 for the Travel and Tourism Sector

3.2 GENERALLY APPLICABLE POLICY AND LAW

3.2.1 WHITE PAPER ON ENVIRONMENTAL MANAGEMENT POLICY (MAY 1998)

The White Paper on Environmental Management Policy (WPEM) is an overarching policy framework that sets out a vision, policy principles and strategic goals for environmental management and sustainable use of natural resources in South Africa. Sectoral policies must subscribe to this policy framework.

The vision projects an integrated and holistic management system for the environment aimed at achieving sustainable development now and in the future. The 7 goals of this policy include:

- Establishment of an effective institutional and legislative framework
- Promotion of sustainable resource use and impact management
- Development of mechanisms to ensure that environmental considerations are effectively integrated into existing and new government policies, legislation and programmes.
- Establishment of mechanisms and processes for effective public participation in environmental governance
- Promotion of environmental literacy, education and empowerment
- Development and maintenance of an information management system to provide accessible information that will support effective environmental management
- Development of mechanisms to deal effectively, and in the national interest, with international issues and obligations in respect of environmental management

The policy defines the role of the Department of Environmental Affairs and Tourism as lead agent for environmental management, including exercising government's custodianship of the environment, and

ensuring that environmental rights are enforced. It specifies the statutory powers required by the Department to fulfill its lead agent responsibilities.

These include:

- Powers to enforce compliance by the public with national policy, laws, norms and standards on environmental management
- Powers to bind all spheres of government and organs of state to comply with and give effect to national environmental laws, norms, standards and guidelines
- Powers to review the environmental impacts of all government policies, plans, programmes and actions, and ensure that they comply with environmental policy, laws, norms and standards.

3.2.2 THE NATIONAL ENVIRONMENTAL MANAGEMENT ACT (ACT 107 OF 1998)

The National Environmental Management Act (NEMA) is the first step in giving legal effect to the environmental right in the Constitution (section 24) and to the White Paper on Environmental Management Policy.

The Act:

- Establishes principles to guide the decisions and actions of all organs of state
- Establishes institutions to:
 - co-ordinate and harmonise the environmental functions of organs of state
 - promote the participation of stakeholders in environmental governance
- Establishes procedures for co-operative governance
- Establishes procedures for conflict management
- Promotes integrated environmental management by establishing minimum procedures for environmental impact assessments, and enabling any national or provincial permitting authority to prescribe environmental impact assessment regulations
- Establishes procedures for ratification of, and giving effect to international environmental instruments
- Promotes compliance and enforcement by means of provisions on:
 - the duty of care
 - protection of workers refusing to do environmentally hazardous work
 - control of emergency incidents
 - access to environmental information and protection of whistle blowers
 - legal standing to enforce environmental laws
 - private prosecution
- Promotes co-regulation by enabling the establishment of environmental management co-operation agreements to promote the principles of environmental management

NEMA is applicable to all functions of the Department as indicated in the policy and legislative framework table.

3.2.3 REVIEW AND AMENDMENT OF THE NATIONAL ENVIRONMENTAL MANAGEMENT ACT (LAW REFORM)

The National Environmental Management Act is framework legislation that gives legal effect to the White Paper on Environmental Management Policy. The Department has now embarked on a 2nd phase of law reform, aimed at giving effect to the legislative reform requirements of other sectoral environmental policies, namely:

- The White Paper on Conservation and Sustainable Use of South Africa's Biological Diversity
- The White Paper on Integrated Pollution and Waste Management for South Africa
- The White Paper on Sustainable Coastal Development in South Africa

New chapters, on biodiversity management, pollution and waste management, and coastal management will be integrated with the existing NEMA. This approach is informed by the need to minimise fragmentation, and to ensure coherence and alignment of sectoral environmental law with NEMA.

3.2.4 ENVIRONMENTAL CONSERVATION ACT (73 OF 1989)

The purpose of the Environmental Conservation Act (ECA) is to provide for the effective protection and the control of activities that may have a detrimental effect on the environment. The following sections of the act have particular relevance for DEAT:

- In accordance with Section 18, the Prince Edward Islands were declared Special Nature Reserves
- Sections 19 and 19a provide for a general prohibition against littering and the removal of litter

- Section 20 deals with waste management, including the establishment and operation of waste disposal sites. Such sites may only be operated under a permit issued by the Minister of Water Affairs
- Section 21 provides for the identification of waste and sewerage disposal and chemical treatment activities by DEAT, specifically those activities which may have a substantial detrimental effect on the environment. Certain mariculture activities can be classified as Section 21 activities
- Section 24 allows the Minister to make regulations with regard to waste management
- Section 26 (b, c, and j) provides for regulations for collection of information on generation and disposal of waste.
- Regulations were promulgated under sections 21, 22 and 26, in September 1997 (Government Gazette No's R1182, R1183 and R1184). The regulations list activities that may not be commenced without an environmental impact assessment, prescribe the EIA procedure, and designate the province as the competent authority. These Regulations require environmental assessments of any public and private (tourism) resort and associated infrastructure.

3.3 ENVIRONMENTAL QUALITY AND PROTECTION

3.3.1 SPECIFIC POLICY

3.3.1.1 White Paper on Integrated Pollution and Waste Management for South Africa (May2000)

The White Paper on Integrated Pollution and Waste Management (IPWM) sets out the government's vision and strategic goals for integrated pollution and waste management in South Africa. The vision of the policy is to: "Develop, implement and maintain an integrated pollution and waste management system which contributes to sustainable development and a measurable improvement in the quality of life, by harnessing the energy and commitment of all south Africans for the effective prevention, minimization and control of pollution and waste". The 7 strategic goals include:

- The establishment of an effective institutional framework and legislation
- Mechanisms to promote holistic and integrated pollution and waste management
- Mechanisms to ensure holistic and integrated planning approaches and processes
- Mechanisms to ensure effective public participation in integrated pollution and waste management governance
- Education and empowerment of South Africa's people to achieve integrated pollution and waste management
- Mechanisms to effectively deal with international issues affecting pollution and waste, in the national interest
- The development of databases and information management systems

The approach of the IPWM is to prevent pollution, minimise waste and to control and remedy impacts. It is intended that the management of waste be implemented in a holistic and integrated manner, extending over the entire waste cycle, from "cradle to grave", including the generation, storage, collection, transportation, treatment and final disposal of waste.

3.3.2 SPECIFIC LAWS AND CONVENTIONS

Table; Specific laws and conventions for the Environmental Quality and Protection function

	INTEGRATED POLLUTION AND WASTE MANAGEMENT	ATMOSPHERIC AND CHEMICALS MANAGEMENT	ENVIRONMENTAL IMPACT MANAGEMENT
POLICY	White Paper on Integrated Pollution and Waste Management		
LAWS	<ul style="list-style-type: none"> ▪ New law as part of NEMA amendment to give effect to the policy ▪ Environmental Conservation Act Sections 19, 19a, 20a and 24 	<ul style="list-style-type: none"> ▪ New law as part of NEMA amendment ▪ Environmental Conservation Act: Section 20, 21, 24, 26 (b, c and j) ▪ Atmospheric Pollution Prevention Act (45 of 1965) 	<ul style="list-style-type: none"> ▪ Amendment of Chapter 5 of NEMA ▪ Regulations in terms of Environmental Conservation Act Sections 21, 22 and 26

	INTEGRATED POLLUTION AND WASTE MANAGEMENT	ATMOSPHERIC AND CHEMICALS MANAGEMENT	ENVIRONMENTAL IMPACT MANAGEMENT
CONVEN- TIONS	NA	<ul style="list-style-type: none"> Convention for the Protection of the Ozone Layer Convention on Prior Informed Consent (PIC) Convention on the Control of Trans-Boundary Movements of Hazardous Wastes and Disposals (Basel Convention) Kyoto Protocol Montreal Protocol on Substances that Deplete the Ozone Layer Persistent Organic Pollutants (POP's) United Nations Framework Convention on Climate Change (UNFCCC) 	NA

3.3.3 ENSURING COMPLIANCE WITH LAWS AND CONVENTIONS

3.3.3.1 Extent of Compliance

Table: Extent of ensuring compliance with laws and conventions by the Environmental Quality and Protection function

LAW	BRIEF DESCRIPTION	COMPLIANCE
NEMA: <ul style="list-style-type: none"> S2: Principles S24(7): Minimum procedures for EIAs 	<ul style="list-style-type: none"> Principles apply to decisions and actions of all organs of state Apply to all legally required environmental impact assessments 	<ul style="list-style-type: none"> No system in place to monitor compliance No system in place to monitor compliance
Environmental Conservation Act	<ul style="list-style-type: none"> Provisions on environmental impact assessment 	<ul style="list-style-type: none"> Adequate level of compliance with EIA regulations No monitoring of compliance with conditions for approval of EIAs
Atmospheric Pollution Prevention Act	<ul style="list-style-type: none"> S2: pollution from industrial processes S3: smoke control S4: dust control S5: motor vehicle emissions 	<ul style="list-style-type: none"> Lack of compliance by many industries Lack of enforcement by local authorities Unvegetated mine dumps cause dust problems Lack of enforcement by local authorities
Convention for the Protection of the Ozone Layer	<ul style="list-style-type: none"> Phase out of ozone depleting substances in line with requirements of Convention 	<ul style="list-style-type: none"> Adequate enforcement by Dept of Trade & Industry; Agriculture; Customs & Excise
Montreal Protocol on Substances that Deplete the Ozone Layer	Controls on: <ul style="list-style-type: none"> Bulk ozone depleting substances Imports / exports i.r.o non-party countries Imports/sale of products requiring ozone depleting substances End use of ozone depleting substances Service/installation of fridges and air conditioners Methyl bromide 	<ul style="list-style-type: none"> High level of compliance with Protocol requirements

3.3.3.2 Constraints to Ensuring Compliance

Table: Constraints to ensuring compliance by the Environmental Quality and Protection function

CONSTRAINTS	DETAILS	ACTIONS
Lack of, or fragmented legal framework	<ul style="list-style-type: none"> For implementation of White Paper on Integrated Pollution and Waste Management No law that enables government to confiscate equipment that relies on use of ozone-depleting 	<ul style="list-style-type: none"> Law reform programme underway Process underway to determine legislative requirements for chemicals management

CONSTRAINTS	DETAILS	ACTIONS
	substances <ul style="list-style-type: none"> No law to manage environmental impacts of hazardous waste 	<ul style="list-style-type: none"> Process underway to determine legislative requirements for chemicals management
Weaknesses in existing legislation and implementation	EIA regulations <ul style="list-style-type: none"> List of activities does not provide thresholds No definition of "substantial detrimental impact" in regulations; regulations thus too broad 	<ul style="list-style-type: none"> Inadequacies in existing legislation to be addressed in law reform programme
Control vested in several departments	<ul style="list-style-type: none"> For implementation of national waste management strategy Interdepartmental co-ordination needed for chemicals management 	<ul style="list-style-type: none"> Agreements to clarify roles and responsibilities Committee for Environmentally Sound Management of Hazardous Materials to be established
Lack of human resources (DEAT)	<ul style="list-style-type: none"> For implementation of national waste management strategy For monitoring compliance with permit conditions under the Air Pollution Prevention Act For chemicals management 	<ul style="list-style-type: none"> Capacity building programmes through the Environmental Capacity Building Unit To be addressed as part of the strategy for implementation of new law To be addressed as part of the strategy for implementation of new law
Lack of human resources (provinces/local)	<ul style="list-style-type: none"> For gathering air quality data Lack of uniformity and capacity for application of EIA regulations No monitoring of conditions of approval under EIA regulations 	<ul style="list-style-type: none"> To be addressed as part of the strategy for implementation of new legislation Minimum standards to be set in new EIA regulations; minimum timeframes to be set
Lack of information	<ul style="list-style-type: none"> No digital database for gaseous emissions and air quality No law to compel importers / exporters to furnish information on use of ozone depleting substances 	<ul style="list-style-type: none"> A National Database on Air Quality Data is to be established and an emission monitoring system developed Legislative options to be investigated

3.4 BIODIVERSITY AND HERITAGE

3.4.1 SPECIFIC POLICY

3.4.1.1 White Paper on Conservation and Sustainable Use of South Africa's Biological Diversity (July 1997)

The White Paper identifies a number of strategies to be developed to give effect to the specific policies. The actions required by DEAT range from enhancing the protected area network to the development of specific strategies such as one on the conservation and sustainable use of reptiles and amphibians. The vision of this White Paper is "A prosperous, environmentally conscious nation, whose people are in harmonious co-existence with the natural environment, and which derives lasting benefits from the conservation and sustainable use of its rich biological diversity".

The goals of the policy are to:

- Conserve the diversity of landscapes, ecosystems, habitats, communities, populations, species and genes in South Africa
- Use biological resources sustainably and minimise adverse impacts on biological diversity
- Ensure that benefits derived from the use and development of South Africa's genetic resources serve national interests
- Expand the human capacity to conserve biodiversity, to manage its use and to address factors threatening it
- Create conditions and incentives that support the conservation and sustainable use of biodiversity
- Promote the conservation and sustainable use of biodiversity at the international level.

3.4.2 SPECIFIC LAWS AND CONVENTIONS

Table: Specific laws and conventions for the Biodiversity function

	BIODIVERSITY MANAGEMENT	CULTURAL AND NATURAL RESOURCE MANAGEMENT
POLICY	White Paper on the Conservation and Sustainable Use of South Africa's Biological Diversity (July 1997)	
LAWS	<ul style="list-style-type: none"> New law as part of NEMA amendment to give effect to the policy 	<ul style="list-style-type: none"> World Heritage Convention Act (1999)
CONVENTIONS	<ul style="list-style-type: none"> Biosafety Protocol Convention on Biological Diversity (CBD) Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) Convention on the Conservation of Migratory Species of Wild Animals (Bonn Convention) Convention on Wetlands (Ramsar Convention) 	<ul style="list-style-type: none"> United Nations Convention to Combat Desertification (CCD) World Heritage Convention

3.4.3 ENSURING COMPLIANCE WITH LAWS AND CONVENTIONS

3.4.3.1 Extent of Compliance

Table: Extent of ensuring compliance with laws and conventions by the Biodiversity function

LAW	BRIEF DESCRIPTION	COMPLIANCE
World Heritage Convention Act	<ul style="list-style-type: none"> Provide for the incorporation of the World Heritage Convention into South African law Recognise and establish world heritage sites 	<ul style="list-style-type: none"> The World Heritage Convention is being successfully implemented through this Act
Convention on Biological Diversity	<ul style="list-style-type: none"> Aims to promote the sustainable use of natural living resources 	<ul style="list-style-type: none"> A system to monitor compliance is not in place A programme for implementing the White Paper on Biological Diversity (which addresses the requirements of the convention) is in the process of being developed
Convention to Combat Desertification	<ul style="list-style-type: none"> National Action Programme required to implement the convention 	<ul style="list-style-type: none"> Implementation of the convention is poor.
Convention on the Conservation of Migratory Species of Wild Animals	<ul style="list-style-type: none"> Co-operation with other countries to ensure conservation of species 	<ul style="list-style-type: none"> Agreements have been entered into
Convention on International Trade in Endangered Species of Wild Fauna and Flora	<ul style="list-style-type: none"> Regulate trade in endangered species. Keep in touch with conservation of endangered species with interaction between parties worldwide. Actively participate in decision-making on the up listing and down-listing of species. Implement measures to combat the smuggling of species to protect the biodiversity. Promote sustainable utilisation of species by trading and hunting. 	<ul style="list-style-type: none"> Positive levels of compliance with the convention A national CITES implementation plan in the process of being developed will enhance compliance
Convention on Wetlands	<ul style="list-style-type: none"> Aims to stem the loss and promote the wise use of all wetlands 	<ul style="list-style-type: none"> A Wetlands Conservation Bill has been proposed to help meet aims of the Convention

3.4.3.2 Constraints to Ensuring Compliance

Table: Constraints to ensuring compliance by the Biodiversity function

CONSTRAINTS	DETAILS	ACTIONS
Lack of, or fragmented legal framework	<ul style="list-style-type: none"> A national legal framework setting norms and standards for biodiversity management is not yet in place 	<ul style="list-style-type: none"> Process underway as part of broader environmental law reform programme
Control vested in	<ul style="list-style-type: none"> Provinces responsible for 	<ul style="list-style-type: none"> Roles and responsibilities to be clarified

CONSTRAINTS	DETAILS	ACTIONS
several departments	implementing the Convention to Combat Desertification (CCD)	
Weakness in implementation of policies	<ul style="list-style-type: none"> A programme for the implementation of the White Paper on the Conservation and Sustainable Use of South Africa's Biological Diversity is lacking 	<ul style="list-style-type: none"> Process underway for preparing Biodiversity Strategy and Action Plan
Redirection of priorities	<ul style="list-style-type: none"> CCD implementation activities halted due to redirection of priorities at a political level. 	<ul style="list-style-type: none"> Decision remains to be taken by the Portfolio Committee and Top Management

3.5 MARINE AND COASTAL MANAGEMENT

3.5.1 SPECIFIC POLICIES

3.5.1.1 *White Paper on a Marine Fisheries Policy for South Africa (May 1997)*

The White Paper strives to improve the overall contribution from the fishing industry to a competitive fast-growing economy which creates sufficient jobs for all work sectors and a redistribution of income and opportunities in favour of the poor.

Policy objectives include:

- All fisheries sector practices conform to relevant international standards, laws and treaties
- Levels and patterns of exploitation, determined on the basis of best available scientific information, do not jeopardise the soundness of the resource, its environment or ecosystem on which biodiversity and long-term optimal sustainable yields depend
- Long-term management plans, which include operational management procedures, be developed to ensure optimal utilisation of all significant living marine resources
- The harvesting of one species does not endanger the continue existence, or cause the substantial depletion of any other species, and a variety of regulatory measures be introduced to avoid such dangers including the full protection of species.

The policy makes provision for the designation of *marine protected areas* (MPAs) for the purposes of scientific study, experimental fishing or conservation, and may include special areas for the protection of particular species. MPAs require careful zoning to minimise their effect on the activities of users. User zones will be considered as a means of separating different user groups.

Mariculture is clearly identified as a sector requiring special attention particularly with regard to promoting expansion and diversification of activities.

3.5.1.2 *White Paper for Sustainable Coastal Development in South Africa (April 2000)*

The White Paper provides the framework for delivery of coastal management functions. The vision for the policy is as follows:

- Celebrate the diversity, beauty and richness of our coast and seek and equitable balance of opportunities and benefits
- Strive for sustainable coastal development involving a balance between material prosperity, social development, cultural values, spiritual fulfilment and ecological integrity
- Strive for a time when all South Africans recognise that the coast is ours to enjoy in a spirit of community
- Look forward to a time when all South Africans assume shared responsibility for maintaining the health, diversity and productivity of coastal ecosystems
- Seek to guide the management of our coast in a way that benefits current and future generations and honours our obligations from local to global levels.

The goals of the policy are to:

- Ensure meaningful public participation and promote partnerships between the state, private sector and civil society
- Promote public awareness about the coast and provide training for effective coastal management and planning
- Promote an integrated coastal planning and management approach
- Ensure the public has the right of physical access to the sea and sea shore on a managed basis
- Ensure public has right of equitable access to opportunities and benefits of the coast
- Promote the diversity, vitality and long-term viability of coastal economies and activities

- Plan and manage coastal development
- Establish and manage a system of coastal protected areas
- Use non-renewable coastal resources in a responsible and sustainable manner
- Rehabilitate damaged or degraded coastal ecosystems and habitats
- Implement pollution control and waste management measures and manage polluting activities to minimise adverse impacts on the health of coastal communities and ecosystems.

3.5.2 SPECIFIC LAWS AND CONVENTIONS

3.5.2.1 Non-Consumptive Use of Marine Living Resources (EMP)

Table: Specific laws and conventions for the Non-Consumptive Use of Marine Living Resources function

	MARINE PROTECTED AREAS	COASTAL RESOURCES	MARINE POLLUTION	ANTARCTICA AND ISLANDS
POLICY	White Paper on Sustainable Coastal Development in South Africa (2000) White Paper on a Marine Fisheries Policy for South Africa (May 1997) White Paper on the Conservation and Sustainable Use of South Africa's Biological Diversity (July 1997)			
LAWS	<ul style="list-style-type: none"> ▪ Marine Living Resources Act (18 of 1998) 	<ul style="list-style-type: none"> ▪ General Policy for the Control of Off-Road Vehicles in the Coastal Zone (Notice 858 of 29 April 1994) ▪ Regulations Regarding Activities in Various Sensitive Coastal Areas (Notices of 1996 and 1998) 	<ul style="list-style-type: none"> ▪ Sea Fisheries Act (12 of 1988) ▪ Marine Pollution Act (Control and Liability) (6 of 1981) ▪ Dumping at Sea Control Act (73 of 1980) ▪ Sea Birds and Seals Protection Act (46 of 1973) ▪ Sea-Shore Act (21 of 1935) 	<ul style="list-style-type: none"> ▪ Antarctica Treaties Act (60 of 1996)
CONVENTIONS	<ul style="list-style-type: none"> ▪ Convention on Biological Diversity: Jakarta Mandate ▪ FAO Conduct of Responsible Fishing ▪ MARPOL: Particularly Sensitive Sea Areas ▪ UNESCO: Biosphere Reserves ▪ Wild Heritage Sites 		<ul style="list-style-type: none"> ▪ Convention on the Prevention of Marine Pollution by Dumping Wastes and Other Matters (London Convention) 	<ul style="list-style-type: none"> ▪ Antarctica Treaty

3.5.2.2 Consumptive Use of Marine Living Resources (EIP)

Table: Specific laws and conventions for the Consumptive Use of Marine Living Resources function

	FISHERIES	MARICULTURE
POLICY	White Paper on a Marine Fisheries Policy for South Africa (May 1997)	
LAWS	<ul style="list-style-type: none"> ▪ Marine Living Resources Act (18 of 1998) Sections 14, 15, 16, 18, 29, 31 and 38 and Regulations in terms of this Act ▪ Sea Fisheries Act (12 of 1988) 	<ul style="list-style-type: none"> ▪ Marine Living Resources Act (18 of 1998) ▪ Sea Shore Act (21 of 1935)
CONVENTIONS	<ul style="list-style-type: none"> ▪ Agreement for the Implementation of the Provisions for UNCLOS Relating to Management and Conservation of Straddling Fish Stocks and Highly Migratory Fish ▪ Convention on Biological Biodiversity in Marine and Coastal Habitats ▪ United National Law of the Sea Convention (UNCLOS) 	<ul style="list-style-type: none"> ▪ Convention on Biological Biodiversity

3.5.3 ENSURING COMPLIANCE WITH LAWS AND CONVENTIONS

3.5.3.1 Extent of Compliance

Table: Extent of ensuring compliance with laws and conventions by the Marine and Coastal Management function

LAW	BRIEF DESCRIPTION	COMPLIANCE
Marine Living Resources Act	<ul style="list-style-type: none"> Representation of bio-geographic zones Protection of habitats Protection of exploited stocks Management plans for MPAs Fishing restricted in MPAs 	<ul style="list-style-type: none"> Not all zones, habitats or exploited stocks adequately protected. Management plans outstanding for a number of MPAs. Compliance with fishing prohibitions in MPAs is poor.
S 43: declaration of marine protected areas		
Chapter 3: Management of Marine Living Resources	<ul style="list-style-type: none"> Fisheries planning Granting of rights for subsistence & recreational fishing Granting of rights for commercial fishing High seas fishing 	<ul style="list-style-type: none"> Extent of compliance varies across fisheries
S18: granting of rights to undertake mariculture activities	<ul style="list-style-type: none"> Scoping report is required, identifying potential environmental impacts, prior to granting of mariculture rights. Full EIA may be required 	<ul style="list-style-type: none"> These provisions are complied with.
General Policy for the control of off-road vehicles	<ul style="list-style-type: none"> Requires local authorities to establish a permitting system for off-road vehicles in coastal zone 	<ul style="list-style-type: none"> Enforcement of this policy by local authorities is poor.
Regulations on Sensitive Coastal Areas	<ul style="list-style-type: none"> Enables local authorities to control specified activities in demarcated sensitive coastal areas. 	<ul style="list-style-type: none"> Enforcement by local authorities, and extent of compliance by landowners is poor.
Marine Pollution (Control and Civil Liability) Act	<ul style="list-style-type: none"> Specific responsibility for environmental protection and clean-up aspects of oil spills in the marine environment delegated to Minister of Environmental Affairs and Tourism 	<ul style="list-style-type: none"> DEAT is reasonably well placed to fulfil these responsibilities. Need to broaden base of expertise through greater involvement of provinces
Dumping at Sea Control Act	<ul style="list-style-type: none"> Gives legal effect to the Convention on the Prevention of Marine Pollution 	<ul style="list-style-type: none"> Permitting system is in place, but need to improve enforcement capability

3.5.3.2 Constraints to Ensuring Compliance

Table: Constraints to ensuring compliance by the Marine and Coastal Management function

CONSTRAINTS	DETAILS	ACTIONS
Lack of, or fragmented legal framework	<ul style="list-style-type: none"> For implementing coastal policy For obtaining mariculture rights 	<ul style="list-style-type: none"> Law reform programme underway Application procedures prepared
Control vested in several departments	<ul style="list-style-type: none"> For managing marine protected areas For promoting & managing mariculture activities 	<ul style="list-style-type: none"> Agreements to clarify roles and responsibilities Interaction between DEAT and Department of Agriculture
Lack of human resources (DEAT)	<ul style="list-style-type: none"> For promoting marine protected areas For managing land-based sources of marine pollution For enforcement of legislation to control environmental impacts of fishing 	<ul style="list-style-type: none"> Dedicated programme to be established Higher levies attached to fishing rights
Lack of human resources (provinces/local)	<ul style="list-style-type: none"> For managing marine protected areas For implementing off-road vehicle policy and regulations on sensitive coastal areas For enforcing legislation to control marine pollution 	<ul style="list-style-type: none"> Funds from Marine Living Resources Fund to support provinces To be discussed at MINMEC and MINTEC
Lack of specialist knowledge/ awareness/ experience	<ul style="list-style-type: none"> For implementing ecosystem approach to managing marine living resources For promoting mariculture 	<ul style="list-style-type: none"> Models being developed Programme defined to promote mariculture and manage environmental impacts

3.6 TOURISM (IMPACTING PRIORITY FUNCTION)

3.6.1 SPECIFIC POLICIES

3.6.1.1 White Paper: The Development and Promotion of Tourism, 1996

The White Paper proposes the concept of responsible tourism as the key guiding principle for tourism development.

Responsible tourism implies a proactive approach by tourism industry partners to develop, market and manage the tourism industry in a responsible manner. It requires the promotion of balanced and sustainable tourism which minimises the impact on the environment.

Responsible tourism means responsibility of government and business to involve the local communities that are in proximity to the tourism plant and attractions through the development of meaningful economic linkages. It implies the responsibility to respect, invest in and develop local cultures and protect them from over-commercialisation and exploitation. In terms of the White Paper, a well-managed tourism industry has the potential to ameliorate, rather than contribute to, South Africa's environmental problems.

In addition, the White Paper puts forward a number of environmental objectives:

- Make the tourism industry in South Africa a leader in responsible environmental practices.
- Require integrated environmental management principles for all tourism projects and all major economic development projects.
- Encourage the conservation and sustainable usage of tourism resources.
- Contribute to the development of a co-ordinated countrywide environmental strategy.

3.6.2 LAWS AND CONVENTIONS

Table: Specific environmental laws and conventions for the Tourism function

TOURISM	
POLICY	▪ White Paper: The Development and Promotion of Tourism (1996)
LAWS	▪ National Environmental Management Act ▪ Environmental Conservation Act
CONVENTIONS	▪ Agenda 21 for the Travel and Tourism Sector

3.6.3 COMPLIANCE WITH LAWS AND CONVENTIONS

3.6.3.1 Extent of Compliance

Table: Extent of compliance with environmental laws and conventions for the Tourism function

LAW	BRIEF DESCRIPTION	ACTIONS TO BE TAKEN TO ENSURE COMPLIANCE
National Environmental Management Act <ul style="list-style-type: none"> ▪ Principles ▪ S24 (7) Minimum procedures for EIAs ▪ Provisions relating to integrated environmental management ▪ Provisions relating to retrospective clean-ups 	<ul style="list-style-type: none"> ▪ Principles apply to decisions and actions of all organs of state ▪ Apply to all legally required environmental impact assessments ▪ Enable DEAT to enter into EMCAs with partners ▪ Apply to the construction and maintenance of all tourism developments 	<ul style="list-style-type: none"> ▪ In view of the concept of "responsible development", promote integration of the project cycle and Integrated Environmental Management ▪ Promote usage of EMCAs ▪ Promote as an element of development criteria in tourism development proposals
Environmental Conservation Act	<ul style="list-style-type: none"> ▪ Provisions on environmental impact assessments 	<ul style="list-style-type: none"> ▪ Promote appointment of balanced project teams to facilitate sustainable tourism development

3.6.3.2 Constraints to Ensuring Compliance

Table: Constraint to ensuring compliance with environmental laws and conventions by the Tourism function

CONSTRAINTS	DETAILS	ACTIONS
Weaknesses in implementation of principles, guidelines and standards for responsible tourism	<ul style="list-style-type: none"> Guidelines for Sustainable Tourism Development are lacking and there is a need to establish clear procedures and guidelines for planned and sustainable Travel and Tourism expansion South Africa has not adopted the principles of Agenda 21 for the Travel and Tourism Industry 	<ul style="list-style-type: none"> A strategy for the implementation of indicators and guidelines for sustainable tourism development is in the process of being developed Tourism Branch to initiate action
Lack of human resources (DEAT)	<ul style="list-style-type: none"> While policy principles are clearly in line with notions of environmental sustainability, implementation has been weak due to resource and capacity constraints. 	<ul style="list-style-type: none"> Appropriate resources and capacities to be identified, established and mobilised

4. INTEGRATED ENVIRONMENTAL MANAGEMENT

Integrated Environmental Management (IEM) is a tool used to assess the environmental impacts of development. IEM is designed to ensure that the environmental consequences of development proposals are adequately considered in the planning process so as to be able to mitigate any negative impacts and to enhance any positive aspects of development proposals.

DEAT specific IEM proposals relate specifically to the review and redrafting of Chapter 5 of NEMA and new EIA regulations. This review is currently underway. Consultations have been held with most provincial environmental departments. Further consultations will be undertaken with national departments such as DLA, DWAF, DME and DOA as well as key stakeholders. Through the initial consultation process, pertinent issues were raised for consideration. These issues will be taken forward in the next consultation phase and include:

- Amendment Of Chapter 5
- New EIA Regulations In Terms Of Section 24 Of NEMA. Proposals from other Departments such as the Department of Land Affairs are being considered and will be negotiated.

5. PERFORMANCE MONITORING

5.1 SYSTEM FOR MONITORING THE IMPLEMENTATION OF THE DEAT EIMP

At the end of this Executive Summary there is a summary of overview of outputs and time-frames for the implementation of DEAT's EIMP. These outputs and timeframes will be used as the basis for monitoring and reporting.

5.1.1 INTERNAL ARRANGEMENTS FOR CO-ORDINATION AND INTEGRATION

Integration between the core functions of the Department is achieved through:

- Regular meetings of senior management
- Strategic planning sessions
- The establishment of key focus areas that cut across core functions

These forums for interaction provide the means through which the implementation of DEATs EIMP will be communicated, co-ordinated and integrated.

5.1.2 DEAT'S PERFORMANCE MONITORING SYSTEM

The DEAT EIMP is directly connected with the Departmental business plan for 2001/02 and the Medium Term Strategic Framework for 2001 – 2004. The EIMP outputs and timeframes (targets) are reflected in both these planning documents and are reflected in the budget.

The EIMP will be monitored and reported on through the following mechanisms:

- Quarterly performance reporting to the Minister and Director-General
- Annual reporting on the EIMP

5.2 PLAN FOR MONITORING COMPLIANCE OF ALL SCHEDULED DEPARTMENTS EIP/EMP

In terms of the National Environmental Management Act No. 107 of 1998, section 16, DEAT is required to monitor compliance by national departments and provinces to their EIPs or EMPs. These organs of state are required to report annually to the DG of DEAT and the CEC within 4 months of the end of its financial year on the implementation of its adopted EIP or EMP.

In addition, each provincial government must ensure that each municipality within its province complies with the relevant provincial EIP. Municipalities must adhere to the relevant provincial EIPs and EMPs and the principles contained in section 2 in the preparation of any policy, programme or plan, including the establishment of integrated development plans and land development objectives.

In order to fulfill its statutory obligations in terms of monitoring and reporting, DEAT intends:

- Designing a process for monitoring compliance with EIPs and EMPs
- Preparing guidelines for scheduled departments on annual reporting
- Designing a process for ensuring that municipalities comply with provincial EIPs and EMPs.

5.3 ENVIRONMENTAL INDICATORS

During the development of the first National State of the Environment Report, 1999 (SOE), it was noted that there were several gaps in accurate, spatially complete and long-term data environmental data. Environmental management decisions are restricted by these information gaps.

DEAT has therefore recently initiated a project to develop a set of indicators and a system for monitoring and reporting, which will assist in the management of natural resources by enhancing existing tools for decision making, such as the state of the environment reports. To ensure that the process is open and comprehensive, and that the products are relevant and useful, the Department intends consulting with parties from a wide range of environmental management spheres.

5.4 ANNUAL NATIONAL REPORT ON SUSTAINABLE DEVELOPMENT FOR THE UNITED NATIONS COMMISSION ON SUSTAINABLE DEVELOPMENT

DEAT, as the lead agent for the environment in South Africa, is responsible for providing the United Nations Commission for Sustainable Development (CSD) with an annual report on progress made with implementing Agenda 21 (Annual Report on Sustainable Development).

DEAT is presently co-ordinating the process for the preparation of a National Strategy for Sustainable Development (NSSD) and will draw on the active participation of other government departments, industry and civil society groups.

Sustainable development indicators are required for the development of the NSSD, which is being co-ordinated by DEAT. As a first step in gathering information for the NSSD and to assist with the annual reporting process, DEAT requested departments preparing EMPs and EIPs to provide additional information on sustainable development indicators. The relevance and applicability of indicators already submitted is currently being reviewed by DEAT.

It is unclear at this stage which department or sphere of government is responsible for compiling a complete set of sustainable development indicators for South Africa. While DEAT is responsible for co-ordinating reporting on sustainable development they do not have a clear mandate to develop sustainable development indicators for government as a whole.

5.5 IMPLEMENTATION: SUMMARY TABLE OF OUTPUTS & TIMEFRAMES PER CHIEF DIRECTORATE

ENVIRONMENTAL MANAGEMENT PLAN

KEY DEPARTMENTAL OBJECTIVE	OUTPUT	SERVICE DELIVERY INDICATOR	SERVICE DELIVERY TARGET OR MILESTONES
ENVIRONMENTAL QUALITY AND PROTECTION Implementation of National Waste Management Strategy	<ul style="list-style-type: none"> Waste plans and management systems in local government Pollutants information register compiled and released Cleanest city in SA identified 	<ul style="list-style-type: none"> Increase in recycling and re-use trends Waste avoidance and minimization practiced Air pollution modelling developed Cleaner production technology initiated Cleanest city announced 	<ul style="list-style-type: none"> First pollutants report published in 2003 Cleanest city announced each year in June 2003
Establishment of a Rapid Response Unit: In order to give effect to NEMA chapter 7, this unit was created with the objective of ensuring the effective and efficient implementation of environment and protection regimes in DEAT.	<ul style="list-style-type: none"> Interim procedures for effective implementation of obligations in terms of NEMA chapter 7 	<ul style="list-style-type: none"> Procedures developed, tested and implemented 	<ul style="list-style-type: none"> 2003
Develop and implement air quality management system and amendment legislation in SA	<ul style="list-style-type: none"> New legislation (Clean Air Act) for air quality management 	<ul style="list-style-type: none"> Act promulgated 	<ul style="list-style-type: none"> 2002
Set environmental standards where necessary and create monitoring mechanisms	<ul style="list-style-type: none"> New environmental standards and monitoring mechanisms Integrated monitoring network National data base 	<ul style="list-style-type: none"> Number of processes or pollutants for which standards are set or monitored Effective monitoring network and data base in place Information easily accessible 	<ul style="list-style-type: none"> Improved environmental quality Network and data base established by July 2002 Network and database operational by December 2002 As per the convention requirements
Implementation of all international conventions	<ul style="list-style-type: none"> United Nations Framework Convention on Climate Change Basel Convention Montreal Protocol Persistent Organic Pollutants Prior Informed Consent 		
Establish effective mechanisms for handling appeals and review of technical reports by specialists and develop other tools for environmental assessment – aim to make Environmental Impact Assessments self funding over the next few years	<ul style="list-style-type: none"> New regulations on environmental impact assessments Improvement in services delivery with respect to projects for which no in house expertise exists Guidelines and policy documents for environmental management tools 	<ul style="list-style-type: none"> Regulations promulgated Time to process and respond to applications and appeals Use of tools and guidelines for decision making 	<ul style="list-style-type: none"> 2002 Processing period of 4 weeks after receipt of reports and appeals Zero appeals on decisions taken on EIAs Better and informed decision making

KEY DEPARTMENTAL OBJECTIVE	OUTPUT	SERVICE DELIVERY INDICATOR	SERVICE DELIVERY TARGET OR MILESTONES
	developed		by making use of tools
BIODIVERSITY AND HERITAGE			
Compilation and implementation of National Biodiversity Strategy and Action Plan	<ul style="list-style-type: none"> Strategy and Action Plans 	<ul style="list-style-type: none"> Strategy published 	<ul style="list-style-type: none"> Publication and implementation of NBSAP by 2003
Bioregional approach to conservation for: Consolidation and expansion of protected areas Financing and commercialisation of protected areas Rationalisation of institutional arrangements Application of new conservation tools and approaches	<ul style="list-style-type: none"> New land acquired and registered, protected areas consolidated and under single management 	<ul style="list-style-type: none"> Pondoland National Park declared Greater Addo National Park consolidated Protected areas increased from 6-8% over 10 years Aghulas National Park and Vhembe/Dongola National Park expanded 	<ul style="list-style-type: none"> 2003
Establishment of Transfrontier Conservation Areas to enhance regional economic growth through tourism development and enhancing the protection of the environment	<p>All identified Transfrontier Conservation Areas established and functioning, namely:</p> <ul style="list-style-type: none"> Kgalagadi (operational) Gaza/Kruger/Gonarezhou Richtersveld / Ais-Ais Maluti/Drakensburg Limpopo/Sashe Lubombo 	<ul style="list-style-type: none"> Number of TFCAs launched and operational Tourism infrastructure developed Increased revenue from tourists 	<ul style="list-style-type: none"> TFCAs launched by 2004
To manage the trade in endangered species	<ul style="list-style-type: none"> Monitoring of enforcement and compliance with the Convention on the Trade in Endangered Species (CITES) and setting of norms and standards 	<ul style="list-style-type: none"> Full implementation of the South African Cites Implementation Programme (SACIP) 	<ul style="list-style-type: none"> April 2002
Implementation of all relevant international conventions	<ul style="list-style-type: none"> Convention on Biological Diversity World Heritage Convention Convention on Combating of Desertification Convention on International Trade in Endangered Species of Wild Fauna and Flora Convention on Wetlands (RAMSAR) Convention on the Conservation of Migratory Species of Wild Animals (Bonn) 		<ul style="list-style-type: none"> As per convention programme
To establish authorities for the management of World Heritage Sites in SA in terms of the World Heritage Conservation Act and implementation of the Act	<ul style="list-style-type: none"> Regulations and the resultant authorities to ensure the conservation of world heritage sites Establishment of authorities for world heritage sites where they do not exist Establishment of core functions and 	<ul style="list-style-type: none"> Promulgation of generic regulations Promulgation of site specific regulations Authority for Cradle of Human Kind Authority for Cape Floral Region Authority for Mapungubwe 	<ul style="list-style-type: none"> June 2002 2003 June 2002 August 2003 August 2003

KEY DEPARTMENTAL OBJECTIVE	OUTPUT	SERVICE DELIVERY INDICATOR	SERVICE DELIVERY TARGET OR MILESTONES
MARINE AND COASTAL MANAGEMENT Restructuring the monitoring, control and surveillance component at MCM	operations of Greater St Lucia Wetland Park Authority	<ul style="list-style-type: none"> Funding of the Greater St Lucia Wetland Park Authority 	2002-2004
Fisheries and Environmental Management and Research	<ul style="list-style-type: none"> Improved fishery compliance in all fishing sectors Outsourced contracts Improved cooperation with other compliance agencies Effective prosecution for non compliance Best scientific advice on resource management Utilisation of new and under-utilised resources Eco-tourism investment plans Improved marine protected area management 	<ul style="list-style-type: none"> Wall to wall coverage of SA coast line Voluntary compliance Effective deterrents Sustainable resource utilization Operational management procedures for key fisheries Designation and consolidation of new marine protected areas 	<ul style="list-style-type: none"> Improve compliance by 80% Ongoing Ongoing
Coastal Management for the effective management of the coastal resource	Promulgation and implementation of Coastal Management Act	Action Plan on coastal management	2002
Implementation of all applicable international conventions	United Nations Law of the Sea Convention		Implementation ongoing
ANTARCTICA AND ISLANDS Management and conservation of Marion and Prince Edward Islands as Special Nature Reserves	Convention on the Conservation of Antarctic Marine Living Resources		As per convention schedule and requirements
Meeting Antarctic Treaty obligations	Issuing of permits	Permits according to the four zones are issued to all visitors to the Islands	Ongoing
ENVIRONMENTAL INFORMATION AND REPORTING Develop and implement a National Strategy for Sustainable Development (NSSD)	National Strategy for Sustainable Development		As per convention schedule and requirements
Establishment of Center for Environmental Information	<ul style="list-style-type: none"> One stop shop for environmental information State of Environment reports Core set of environmental indicators Meta database 	<ul style="list-style-type: none"> NSSD completed as action plan arising from Agenda 21 review process Centre established and operational Number of reports published Frequency of updating Core set of indicators implemented Meta database released 	<ul style="list-style-type: none"> NSSD approved by government and all stakeholders Request for environmental information processes within 3 working days Reports updated at least every two years Core set of environmental indicators portray environmental pressures and conditions Meta database accessible and up to date

KEY DEPARTMENTAL OBJECTIVE	OUTPUT	SERVICE DELIVERY INDICATOR	SERVICE DELIVERY TARGET OR MILESTONES
Consolidation and implementation of environmental law	<ul style="list-style-type: none"> National Environmental Advisory Forum (NEAF) Programme to monitor compliance with minimum principles, procedures and standards in National Environmental Management Act and amendment Institutional infrastructure to deal with environmental disputes 	<ul style="list-style-type: none"> NEAF established Complete the environmental law reform programme by 2004 Compliance programme developed and operational Conciliation interventions reported 	<ul style="list-style-type: none"> 2002 Easy access by civil society to mechanisms to process environmental disputes

ENVIRONMENTAL IMPLEMENTATION PLAN

KEY DEPARTMENTAL OBJECTIVE	OUTPUT	SERVICE DELIVERY INDICATOR	SERVICE DELIVERY TARGET OR MILESTONES
CONSUMPTIVE USE OF MARINE LIVING RESOURCES			
Fisheries industry transformation and stabilization. To ensure equitable access to our fishing resource	<ul style="list-style-type: none"> Implementation of fisheries transformation plan Equitable participation by Historically Disadvantaged Individuals in fishing industry including subsistence fishers Establishment and operation of Rights Allocation Unit Improved rationalisation of fishing industry structure Artisanal fisheries as sector recognized in Marine Living Resources Act 	<ul style="list-style-type: none"> Transformed fishing industry Economically competitive fishing industry 	<ul style="list-style-type: none"> Ongoing Ongoing 2002 2004 2004
RESOURCE DEVELOPMENT (MARICULTURE)			
Permit allocation	Improved system for permit allocation	Number of permits allocated	2001
Monitoring and evaluation	Effective monitoring programmes to investigate whether permit conditions are working	Extent of compliance with permit conditions	2001
TOURISM			
Implement the White Paper on the Promotion and Development of Tourism	<ul style="list-style-type: none"> Guidelines and indicators for responsible/sustainable tourism development Strategy for the implementation of indicators and guidelines for sustainable tourism development Monitor and evaluate tourism development strategies and projects in terms of "responsible tourism" and "sustainability" 	<ul style="list-style-type: none"> Integration of tourism business development considerations with environmental considerations 	2001 - 2004

KEY DEPARTMENTAL OBJECTIVE	OUTPUT	SERVICE DELIVERY INDICATOR	SERVICE DELIVERY TARGET OR MILESTONES
	<p>concepts</p> <ul style="list-style-type: none"> ▪ Viability studies for tourism development projects undertaken in line with environmental legislative requirements ▪ Review of existing tourism legislation to give effect to the policy objectives of the Tourism White Paper including the concept of responsible and sustainable tourism 		

CHAPTER ONE: OVERVIEW OF POLICY AND LEGISLATIVE MANDATE

1.1 PURPOSE OF DEAT ENVIRONMENTAL IMPLEMENTATION AND MANAGEMENT PLAN

A central objective of the National Environmental Management Act (Act 107 of 1998) (NEMA) is to establish institutions that promote co-operative environmental governance and procedures for co-ordinating environmental functions exercised by organs of state. The Environmental Implementation Plans (EIPs) and Environmental Management Plans (EMPs), described in chapter 3 of the Act, are central to the system that promotes co-operative governance. Their purpose is to co-ordinate and harmonise the environmental policies, plans and programmes of organs of state, and to provide a basis for monitoring performance on environmental sustainability targets.

Scheduled departments must prepare EIPs and EMPs at least every 4 years. The first edition EIPs/EMPs are a milestone in a process of continual improvement in which scheduled departments set and measure performance on environmental sustainability targets and clearly define areas of co-operative environmental governance. Scheduled departments must report annually, within 4 months of the end of the financial year, on the implementation of their adopted EIP/EMP.

The EIP describes priority Departmental policies, plans and programmes that may impact on the environment and how these will comply with the NEMA principles and national environmental norms and standards. The EMP describes the Department's environmental management functions and environmental policies / laws, and efforts to ensure compliance by other departments, with such environmental policies and laws.

The Department of Environmental Affairs and Tourism (DEAT) is listed in both Schedules 1 and 2, as responsible for functions that both impact on the environment, and involve management of the environment. Tourism and certain provisions in marine and coastal management (allocation of rights for fishing and mariculture) have been identified as having a potential impact on the environment. Functions involving management of the environment include those dealing with environmental quality and protection; biodiversity and heritage; and non-consumptive use of marine resources

1.2 POLICY AND LEGISLATIVE MANDATE

In this section, information is provided on generally applicable policies and laws for DEAT. The EMP and EIP chapters provide detailed information on function specific policies and laws.

1.2.1 OVER-ARCHING CONTEXT

South Africa is faced with three key challenges: poverty eradication, economic development and environmental protection. The pressing need for rapid growth and development to alleviate poverty is often seen as incompatible with environmental protection with short-term financial gains taking precedence over longer-term environmental sustainability.

The South African economy relies heavily on natural resources for activities such as mining, agriculture, forestry, fishing and tourism. Natural resources also underpin rural livelihoods and most economic activities in the country depend on ecological processes such as the water cycle, air quality and pollutant and waste absorption. Without an ecologically sound natural resource base, long-term economic growth and development is not feasible. Environmental management is therefore an integral and non-negotiable part of economic development.

As custodian, government holds in public trust, the environment for the benefit of present and future generations. It therefore has a duty to manage the environment including human impacts upon it in a sustainable manner for the public benefit and good while at the same time, protecting our environmental heritage.

This public trust doctrine is given effect in section 24(b) of the Constitution, which entitles citizens to expect that government take certain specific measures to protect the environment. Section 24 is based on the socio-economic paradigm and imposes a positive duty on the state to ensure that development takes place in an ecologically sustainable manner for the benefit of present and future generations. In this vein, section 24 obliges government to ensure that development, however justifiable, must be accompanied by reasonable measures that protect the environment. These constitutional duties bind the environmental functions of all government departments.

Having regard to the historical fragmentation of environmental functions throughout government, the *Environmental Management Policy For South Africa* requires all national departments and other organs of state at every sphere of government to comply with the national policy on environmental management in order to achieve integrated and holistic environmental management.

To this end, the policy conceives of the National Department of Environmental Affairs and Tourism as the lead agent responsible for:

- Developing and implementing an integrated and holistic environmental management system
- Co-ordinating and supervising environmental functions in all spheres of government
- Developing and enforcing an integrated and comprehensive management system
- Giving effect to the policy

As lead agent, DEAT is responsible for exercising government's stewardship of the environment, ensuring that the environmental rights of all people in South Africa are enforced. In fulfilling its constitutional, executive and legislative obligations, DEAT is required to integrate and co-ordinate the environmental functions, policies, strategies and legislation of all government departments at every sphere of government.

In recent years the world has become more aware of the intricate relationship between social and economic development and environmental protection and the need for their integration as a means to achieve sustainable development. Sustainable development is development that meets the needs of present generations without compromising the ability of future generations to meet their own needs. Sustainable development embodies two key concepts, namely, the concept of essential needs of the poor to which priority should be given and the notion of limitations on the environment's ability to replenish itself.

In 1992, the United Nations Conference on Environment and Development (UNCED)-popularly known as the Earth Summit identified the link between environmental protection, economic activity and social development. Agenda 21 was undoubtedly the most important and complete document to emerge from the Earth Summit. It has become the blueprint for sustainability and forms the basis for sustainable development strategies. Indeed, in 2002, to mark the tenth anniversary of the Earth Summit, South Africa will host the World Summit on Sustainable Development.

In the South African context, the growth and development needed to improve the quality of life of all South Africans must be based on the sustainable use of environmental resources. This necessitates that we bring about environmental governance that is based on a high level of co-operation between organs of state exercising environmental functions, that it is transparent and involves a high level of public participation and accountability for the benefit of all South Africans.

Sections 40 and 41 of the Constitution provide the foundation for co-operative governance, representing a shift away from the traditional separation of powers and hierarchical levels of government and the concentration of powers at the national level. It recognises the distinctive character of each sphere of government and the inter-dependent and inter-related nature of the relationships between the spheres of government.

The National Environmental Management Act (NEMA) was promulgated within the framework of the Constitution and thereby, reinforces the constitutional imperative of co-operative governance in the field of environmental management. In particular, chapter three of NEMA provides extensive procedures for co-operative governance and creates mechanisms for co-ordination and alignment of environmental functions by way of environmental implementation plans and environmental management plans (EIPs and EMPs). The purpose of these plans is to set out how the various departments will ensure that their policies, plans and programmes and the exercise of their powers that may affect the environment will comply with the principles, norms and standards for the protection of the environment.

Through ensuring the co-ordination, alignment and implementation of these plans, the DEAT promotes integrated, equitable, participatory, effective and sustainable environmental management practices, thereby giving effect to and promoting the concept of sustainable development.

1.2.2 POLICY MANDATE

White Paper on Environmental Management Policy (May 1998)

The White Paper on Environmental Management Policy (WPEM) is an overarching policy framework that sets out a vision, policy principles and strategic goals for environmental management and sustainable use of natural resources in South Africa. Sectoral policies must subscribe to this policy framework.

The vision projects an integrated and holistic management system for the environment aimed at achieving sustainable development now and in the future. The 7 goals of this policy include:

- Establishment of an effective institutional and legislative framework
- Promotion of sustainable resource use and impact management
- Development of mechanisms to ensure that environmental considerations are effectively integrated into existing and new government policies, legislation and programmes.
- Establishment of mechanisms and processes for effective public participation in environmental governance
- Promotion of environmental literacy, education and empowerment
- Development and maintenance of an information management system to provide accessible information that will support effective environmental management
- Development of mechanisms to deal effectively, and in the national interest, with international issues and obligations in respect of environmental management

The policy defines the role of the Department of Environmental Affairs and Tourism as lead agent for environmental management, including exercising government's custodianship of the environment, and ensuring that environmental rights are enforced. It specifies the statutory powers required by the Department to fulfill its lead agent responsibilities. These include:

- Powers to enforce compliance by the public with national policy, laws, norms and standards on environmental management
- Powers to bind all spheres of government and organs of state to comply with and give effect to national environmental laws, norms, standards and guidelines
- Powers to review the environmental impacts of all government policies, plans, programmes and actions, and ensure that they comply with environmental policy, laws, norms and standards.

Other sectoral policies include Biodiversity and Heritage, Integrated Pollution Prevention and Waste Management, Coastal Management and Tourism. These policies are discussed in detail in the EMP and EIP chapters.

1.2.3 LEGISLATIVE MANDATE

The National Environmental Management Act (Act 107 Of 1998)

The National Environmental Management Act (NEMA) is the first step in giving legal effect to the environmental right in the Constitution (section 24) and to the White Paper on Environmental Management Policy. NEMA is applicable to all functions of the Department.

The Act:

- Establishes principles to guide the decisions and actions of all organs of state
- Establishes institutions to:
 - co-ordinate and harmonise the environmental functions of organs of state
 - promote the participation of stakeholders in environmental governance
- Establishes procedures for co-operative governance
- Establishes procedures for conflict management
- Promotes integrated environmental management by establishing minimum procedures for environmental impact assessments, and enabling any national or provincial permitting authority to prescribe environmental impact assessment regulations
- Establishes procedures for ratification of, and giving effect to international environmental instruments
- Promotes compliance and enforcement by means of provisions on:
 - the duty of care
 - protection of workers refusing to do environmentally hazardous work
 - control of emergency incidents
 - access to environmental information and protection of whistle blowers
 - legal standing to enforce environmental laws
 - private prosecution
- Promotes co-regulation by enabling the establishment of environmental management co-operation agreements to promote the principles of environmental management

DEAT has embarked on a 2nd phase of law reform, aimed at giving effect to the legislative reform requirements of other sectoral environmental policies, namely:

- The White Paper on Conservation and Sustainable Use of South Africa's Biological Diversity
- The White Paper on Integrated Pollution and Waste Management for South Africa
- The White Paper on Sustainable Coastal Development in South Africa.

New legislation on biodiversity management, pollution and waste management, and coastal management will be integrated with the existing NEMA. This approach is informed by the need to minimise fragmentation, and to ensure coherence and alignment of sectoral environmental law with NEMA.

Environmental Conservation Act (73 Of 1989)

The purpose of the Environmental Conservation Act (ECA) is to provide for the effective protection and the control of activities that may have a detrimental effect on the environment. The Act applies across the functions of DEAT. Section 50 of NEMA repealed most Sections of the ECA, excepting Sections 21, 22 and 26. These Sections are concerned primarily with environmental impact assessments.

1.3 VISION, MISSION AND FOCUS AREAS

1.3.1 VISION

Leading environmental management and tourism in the interest of sustainable development for all

1.3.2 MISSION

To contribute to the improvement of the quality of life of all South Africans by:

- Promoting the sustainable development, utilisation and protection of our natural and cultural resources
- Establishing responsible tourism that ensures environmental sustainability and which contributes to job creation and a better quality of life
- Harnessing the skills, experience and knowledge of the environment of all South Africans
- Fostering equitable access to the benefits derived from our natural and cultural resources
- Empowering the South African public, communities and organisations through participation, environmental education, capacity building, research and information services
- Working together with all relevant stakeholders and spheres of government in the spirit of good governance
- Ensuring that all international participation and obligations are undertaken in the context of South Africa's environmental policies and principles.

1.3.3 PRIORITY FOCUS AREAS

Focus Area 1: Create the conditions for responsible tourism growth and development

Focus Area 2: Promote the conservation & development of natural and cultural resources for sustainable use

Focus Area 3: Protect and enhance the quality and safety of the environment

Focus Area 4: Provide accessible environmental and tourism information for sound planning and decision-making.

1.4 STRUCTURE OF THE DEPARTMENT

The core functions of DEAT are organised into four Branches (as per 2002 organogram).

- Environmental Management (environmental management functions)
- Biodiversity and Conservation (environmental management functions)
- Marine and Coastal Management (environmental management and impacting functions)
- Tourism (impacting functions)

1.4.1 BRANCH: ENVIRONMENTAL QUALITYMANAGEMENT

Chief Directorate Environmental Quality and Protection

- Waste Management
- Air Quality Management
- Climate Change and Ozone Layer Protection
- Chemicals and Hazardous Waste Management

Chief Directorate Environmental Planning and Co-ordination

- Environmental Monitoring and Reporting
- Environmental Capacity Building
- Law Reform, Planning and Conciliation
- Environmental Impact Management

1.4.2 BRANCH: BIODIVERSITY AND HERITAGE

Chief Directorate: Transfrontier Conservation and Protected Areas

- Transfrontier Conservation Areas
- Protected Areas

Chief Directorate: Biodiversity and Heritage

- Biodiversity Management
- Cultural and Local Natural Resources Management

1.4.3 BRANCH: MARINE AND COASTAL MANAGEMENT

Chief Directorate: Research, Antarctica and Islands

- Antarctica and Islands
- Research and Development

Chief Directorate: Monitoring, Control and Surveillance

- Compliance
- Monitoring and Surveillance

Chief Directorate: Resource Management

- Resource Management and Allocations
- Integrated Coastal Management and Development

1.4.4 BRANCH: TOURISM

Chief Directorate Tourism Development

- Tourism Business Development
- Research and Development

Chief Directorate Tourism Support

- Liaison/Intergovernmental Coordination
- Quality Assurance

1.5 ENVIRONMENTAL MANAGEMENT FUNCTIONS OF DEAT

1.5.1. ENVIRONMENTAL QUALITY AND PROTECTION

The 1999 State of the Environment Report shows that only 5% of all South Africa's hazardous waste is properly disposed of. Also, South Africans generate more than 0.7kg of waste per person per day, a figure more typical of a developed country than a developing one. South Africa has a coal-based energy system. Because of this intense use of a fossil fuel, there are pockets that emit high degrees of air pollution. South Africa is ranked 20th in the world as far as greenhouse gas production is concerned, mainly because we are so dependent on coal for energy. Although small by international standards, South Africa's chemical industry is recognised as a major chemical trading nation in terms of global statistics. The industry contributes about 5% of the GDP and makes up 25 % of the manufacturing sector. Management of chemical waste is therefore an important area for DEAT.

The White Paper on integrated Pollution Prevention and Waste Management, approved by Cabinet in February 2000, aims to totally change South Africa's approach to handling waste. It represents a paradigm shift from dealing with waste only after it is generated towards pollution prevention and waste minimisation at source.

Over-Arching Environmental Quality and Protection Functions

- Implement the Integrated Pollution and Waste Management Policy for South Africa
- Improve waste service provision and recycling by municipalities
- Initiate community waste and pollution management initiatives
- Develop one integrated pollution and waste management permitting and licensing system
- Service and implement international Conventions

Integrated Pollution Prevention and Waste Management

- Prevent, reduce and manage pollution
- Increase recycling and reclaiming of waste

- Promote cleaner production technology in key pollution sectors
- Create jobs

Atmospheric Protection and Chemical Management

Air Quality Management

- Develop policies, legislation and strategies on the management of air quality in South Africa
- Enforce air quality legislation
- Develop and implement national air quality standards

Global Climate Change

- Co-ordinate the climate change policy formulation process
- Develop local awareness / education campaigns on climate change and the ozone depletion
- Restrict, and eventually phase-out, the use of ozone-depleting substances (ODS) which have been identified as posing a threat to the ozone layer and are regulated under the Montreal Protocol

Hazardous Substance Management and Pollutant Information

- Reduce the polluting and negative impact of hazardous waste and materials on the environment, health and safety
- Promote the environmentally sound and safe management of such materials in a sustainable manner through effective co-ordination, both nationally and internationally
- Collect, co-ordinate, and manage data of pollutants released into the environment

Environmental Impact Management

- Provide and enforce legislation and regulations dealing with Environmental Impact Assessments (EIAs)
- Develop environmental management decision support tools
- Develop and promote self and co-regulatory approaches
- Provide guidance on the design and use of environmental management co-operation agreements

1.5.2 BIODIVERSITY AND HERITAGE

South Africa has the third highest level of biodiversity in the world. We have over 800 species of birds; more than 300 species of mammals; 850 grass species; 99 amphibian species; over 18 000 flowering plants and ferns; 288 reptiles; about 50 000 recorded insect species (and at least 50 000 that have not been described); and between 3 000 and 6 000 spiders. Many of these species are found no-where else in the world and need protection. In addition, potential wealth from biodiversity is not safeguarded in South Africa. Wetlands are of significant value to the country for instance they mitigate floods by slowing rapid water runoff and release water during droughts. However, South Africa is thought to have lost about half of its wetlands through agriculture, industry, roads or other developments. According to the United Nations, 90% of South Africa falls within a desertification risk area. Approximately 25% of this land is already severely degraded with 5% of South African land being so badly over-cultivated, overgrazed and eroded that it shows up as bedrock in satellite pictures.

Over-Arching Biodiversity and Heritage Functions

The Chief Directorate Biodiversity and Heritage seeks to promote the sound management of biodiversity for sustainable and equitable use through promoting conservation and development of these resources

Biodiversity Management

- Implement the White Paper on the Conservation and Sustainable Use of South Africa's Biological Diversity
- Establish a national system to manage biodiversity and conservation areas
- Regulate utilisation of biological diversity
- Provide biodiversity information for optimal utilisation
- Implement International Conventions

Cultural and Natural Resource Management

- Implement the Convention to Combat Desertification (CCD).
- Establish Transfrontier Conservation Areas (TFCA).
- Implement the World Heritage Convention.
- Integrate cultural and natural resources management into environmental management processes

1.5.3 MARINE AND COASTAL MANAGEMENT

One of the key environmental challenges facing South Africa is the management of marine resources and taking care of the enormous coastline. South Africa is richly endowed with a diverse coastline of more than 3000 km, and an adjacent Exclusive Fishing Zone stretching 200 nautical miles (386 km) seaward. This vast region comprises the cool and rich fishing grounds that provide enormous benefits to the people of South Africa and offers unique opportunities for economic and social development.

In addition, South Africa is one of 26 countries with a presence on Antarctica, with the SANAE IV base situated 150km inland of this territory. South Africa also has research teams stationed on Gough Island (British territory) and Marion Islands (part of the Prince Edward Islands group over which South Africa exercises sovereignty). Scientists at these three stations are involved in a variety of studies including the impact of long-line fishing on seabird populations, krill distribution and cosmic rays.

Marine and Coastal Management aims to:

- Facilitate orderly access to exploitation and utilisation of marine and coastal resources
- Exercise control over marine and coastal resources in a fair and equitable manner.
- Conserve marine and coastal ecosystems through the long-term sustainable utilisation of the resources

Marine and Coastal Management is therefore responsible for functions that have an affect on the environment, and functions that involve management of the environment. Functions that involve the management of the marine environment include non-consumptive use of marine living resources, management of coastal resources, management of marine pollution and Antarctica and Islands.

Over-Arching Marine and Coastal Environment Management Functions

- Implement the White Papers on: Sustainable Coastal Development; Marine Fisheries Policy; and Conservation of Biodiversity
- Promote sound use of non-consumptive resources
- Control and reduce marine pollution

Management of Non-Consumptive Use of Marine Living Resources

- Research and develop policy with regard to the:
 - establishment of marine protected areas
 - consumptive and non-consumptive use of resources within such areas
- Facilitating the establishment of a network of MPAs that ensures representation and protection of South Africa's marine biodiversity, facilitates fishery management and promote tourism objectives
- Ensuring that management plans are prepared, and that marine protected areas are managed accordingly.

Management of Coastal Resources

- Draft legislation required for effective coastal management.
- Develop coastal management guidelines, information and decision-support systems, to inform and support sound decision-making regarding the sustainable utilisation of strategic coastal resources.
- Enable effective information exchange amongst all South Africans regarding coastal management principles to ensure the sustainable use of the coast.
- Promote sound coastal management, through maintaining existing re-active advisory and co-ordinating services with various stakeholders.
- Enable disadvantaged coastal interest groups to benefit from coastal resources, and facilitate joint responsibility between resource users and relevant authorities in the management of coastal resources.

Management of Marine Pollution

- Promote measures aimed at controlling and reducing the reduction of pollutants and alien species from shipping into the marine environment.
- Control the dumping of waste and other matter into South Africa's coastal waters by implementing the provisions of the London Convention and Protocol.
- Develop and maintain the capacity of South and Southern Africa to respond to oil spills.
- Coordinate responses to oil spills, monitor their incidence and promote measure to reduce them.
- Promote measures aimed at controlling and reducing the introduction of pollutants from land-based sources into the marine environment.
- Promote measures aimed at controlling and reducing the introduction of pollutants from offshore mining activities (oil & gas, diamonds etc) into the marine environment.

Antarctica and Islands

- Provide scientific, liaison, logistical, administrative and personnel management and support to the South African National Antarctic Programme (SANAP) and its international partners
- Manage South Africa's interests in Antarctica. This is crucial as international control/influence over the Antarctic expands and to avoid negative impacts on national interest without due participation.
- Maintain a base on the Antarctic continent (SANAE IV).
- Maintain a presence on Marion Island as a national asset with economic and regional interests.
- Manage the Prince Edward Islands, and the surrounding Exclusive Economic Zone, as South African territory in accordance with the Prince Edward Islands Management Plan (PEIMP).
- Account for geographic considerations. South Africa is "downstream" and directly adjacent to any potential impacts from human or environmental effects in Antarctica and the Southern Ocean.

1.5.4 ENVIRONMENTAL PLANNING AND COORDINATION**Over-Arching Environmental Planning and Coordination Functions**

- Develop and implement an Environmental Capacity Building strategy
- Build a system for consolidated and integrated environmental reporting for South Africa
- Develop a coherent system across government for the planning and co-ordination of sustainable development
- Give effect to legislative requirements in the policies on coastal management, biodiversity and pollution and waste management

Environmental Information and Reporting

- Develop an integrated State of the Environment Reporting System
- Co-ordinate the establishment of, and provide access to, key national environmental geo-referenced data-sets
- Establish the entry point to environmental information

Law Reform, Planning and Conciliation

- Co-ordinate and facilitate the NEMA review and environmental law reform program
- Promote a coherent system across government for planning and co-ordination for sustainable development
- Give effect to the conflict management provisions of NEMA

1.6 ENVIRONMENTAL IMPACTING PRIORITY FUNCTIONS OF DEAT

DEAT's priority functions that impact on the environment include some Marine and Coastal Management functions and the Tourism functions.

1.6.1 MARINE AND COASTAL MANAGEMENT

Functions that affect the environment are those concerned with the management of the consumptive use of marine living resources including the allocation of fishing rights and resource development (mariculture).

1.6.1.1 Management of Consumptive Use of Marine Living Resources**Management of Consumptive Use of Marine Living Resources Priority Functions**

- Allocate fishing rights and promote transformation in the fishing industry
- Administer the fisheries (by means of regulating the fleet and gear types; setting limits on seasons and areas; collecting the fisheries landing information; making decisions on allocation of resources)

Potential Negative Environmental Impacts of the Consumptive Use of Marine Living Resources

South African fisheries includes demersal fishery (dominated by deep-sea trawling for Cape hakes), pelagic fishery (anchovies, pilchards and herrings), rock lobster fishery, abalone fishery and line fishery. The productiveness of coastlines varies from a highly productive West Coast, in common with other marine ecosystems throughout the world, to the considerably less productive East Coast. The living marine resources of South Africa have been exploited for many centuries. Expansion of this activity is limited by natural productive capacity. It is therefore necessary to limit and control the total harvesting pressure according to what the resources can sustain on a long-term basis.

1.6.1.2 Resource Development (Mariculture)

The White Paper on a Marine Fisheries Policy for South Africa, 1997, clearly identifies mariculture as a sector requiring special attention particularly with regard to promoting expansion and diversification of activities.

The goal of mariculture development in South Africa is to create a sustainable sector highly integrated into the environment of the country's coastal regions, and with its concomitant benefits for their individual and diverse social and economic climates. Mariculture refers to the commercial production or farming of marine species such as mussels, oysters, scallops, abalone, finfish, seaweed, prawns clams, ornamental fish and corals. It is an emerging industry with high economic potential. Some of its commercial products are of high value, capable of earning export revenues on the principal seafood markets overseas, and others are popular commodities on national markets. The new sector of mariculture is a legitimate industry for development along the nation's coastline, but activities must be appropriately integrated with national policies for coastal management. As its systems and practices are dependent on high quality water, successful mariculture production is a recognisable bio-indicator of good management. Such an industry can contribute to the enhancement of equitable use of coastal resources, offering social and economic benefits to the coastal communities.

Mariculture Priority Functions

- Mariculture research
- Mariculture management
- Allocation of mariculture rights

Potential Negative Environmental Impacts of Mariculture

Coastal development in the form of mariculture can alter coastline ecosystems, increase pollution, lead to over-exploitation of resources and allow the introduction of alien species.

Mariculture has the potential to produce a substantial detrimental effect on biodiversity, particularly with respect to alien introductions. In South Africa, alien mussels, oysters and some scallop are cultured on an economic scale and culturing alien scallop and turbo has been attempted on an experimental basis.

Benthic biodeposition from suspended culture and finfish farms leads to excessive organic loading of benthic sediment and biodiversity disturbance. This is especially a problem in sheltered bays with limited circulation and the resultant likelihood of eutrophication.

Changes in circulation patterns, created by suspended cages, rafts and long-lines, induce change in local hydrography and plankton cycles and perhaps an increase in toxic blooms

Confining animals in mass culture and high densities increases the incidence and spread of diseases. Chemicals can be introduced to enhance growth. Accidental release of spawning products or alien species leads to an impact on biodiversity.

1.6.2 TOURISM

The Tourism function aims to fulfil the National Government's role towards creating the conditions for responsible tourism growth and development. The Tourism Branch plays a co-ordinating and policy development role. This function has no statutory authorisations to regulate the tourism industry.

The function is a complex one. It involves many stakeholders across the tourism delivery chain and requires bringing together all aspects of the industry, and the broader tourism economy, working in collaboration towards a common goal. It is the intention of the Tourism function to promote tourism which is government-led, private sector driven and community-based.

Tourism Priority Functions

- Promote co-ordination and collaboration amongst various tourism stakeholders;
- Develop and co-ordinate tourism policy
- Forge international and regional institutional linkages.

Potential Negative Environmental Impacts of Tourism

South Africa's tourism base rests on a rich diversity of fauna and flora, cultural resources and geographical features. The long-term sustainability of the tourism industry depends on the lasting quality of this environment. All types of tourism and all tourism processes have environmental impacts. The impact of

tourism varies with the type of tourist, their activities and behaviour, the type of infrastructure, the nature of the environment, the climate and the season. In general the greater the volume and concentration of visitors, the greater the environmental stress.

Environmental impacts are a two-way process: tourism affects the receiving environment and host communities, but environmental changes in a particular destination can have equally strong impacts on the local tourism industry, boosting demand or reducing numbers. Tourism is reliant on scenic qualities of natural and built landscapes for its attractions and there is always the risk that the environmental attractions of particular destinations will fade. Insensitive development not in harmony with its surroundings detracts from the tourism potential of the area.

Some of the possible negative ecological impacts of tourism, which also pose threats to the long-term sustainability of the tourism industry, are the following:

PROGRAMME	ANTICIPATED OUTCOMES	POTENTIAL IMPACTS
Infrastructure Development	<p>Increased jobs and employment opportunities for South Africans</p> <p>Increase contribution of tourism to the overall economy of South Africa</p> <p>Increased foreign visits and foreign exchange into South Africa</p>	<p><i>Pollution (water, land and air)</i></p> <ul style="list-style-type: none"> ▪ Pollution of watercourses and coastal areas through inadequate sewerage treatment for the tourist-inflated population is one of the commonest tourism-generated problems affecting the physical environment. ▪ large hotel chains can be significant consumers of large quantities of harmful chemicals, which can add to water pollution ▪ inadequate integrated waste management planning, especially in rural areas, is often associated with pollution of ground and surface water <p><i>Marine and terrestrial habitat degradation.</i></p> <ul style="list-style-type: none"> ▪ Destinations where the ecological impacts are potentially most damaging include areas with high levels of biodiversity and areas sensitive to hydrological change ▪ Disturbance in areas of high levels of biodiversity can rapidly lead to irreversible damage, including species extinction <p><i>Damage to landscapes.</i></p> <ul style="list-style-type: none"> ▪ Uncoordinated coastal zone management leads to unsightly ribbon development along coastlines and degradation of coastal land- and seascapes. ▪ <i>Unconsidered water abstraction</i> ▪ In many rural areas, access to water is poor. Tourism development in these areas may result in reduced access to water for rural people. Unconsidered water abstraction for tourism development may also negatively affect ecological functioning.
Improved access for tourists and mobility	<p>Increased foreign visits and foreign exchange into South Africa</p>	<p><i>Contribution to world-wide environmental problems:</i></p> <ul style="list-style-type: none"> ▪ Climate change from aircraft emissions and other forms of transport <p><i>Air transport</i></p> <ul style="list-style-type: none"> ▪ Aircraft are sources of noise and atmospheric pollution ▪ Airports consume space and energy and attract traffic congestion ▪ In-flight services can be wasteful of materials and packaging <p><i>Over and unsanctioned exploitation of resources</i></p> <ul style="list-style-type: none"> ▪ Applies particularly to the marine environment which cannot support heavy recreational exploitation. For example tourists driving their 4x4's on beaches causing compaction of sand and damage to animal life, or having the same effect on fauna by racing through game reserves <p><i>Denying locals access to natural resources</i></p> <ul style="list-style-type: none"> ▪ Increasing access to tourists can lead to decreased access

PROGRAMME	ANTICIPATED OUTCOMES	POTENTIAL IMPACTS
		by local communities to natural resources on which many may depend for their livelihoods for example grazing livestock and harvesting of fruit, seeds, honey, multi plants, fuel, timber, thatch, weaving materials and shellfish.
Marketing and Communication	Improved image of South Africa internationally Increased foreign visits and foreign exchange into South Africa	<p><i>Ecologically unsound marketing approaches</i></p> <ul style="list-style-type: none"> ▪ Potential tourism analyses tend to focus on the available or potential "tourism plant" and potential market ▪ Ecologically based approaches such as carrying capacity are not always considered <p><i>Mass tourism</i></p> <ul style="list-style-type: none"> ▪ Implies thousands of visitors concentrated in particular areas needing large-scale investment in accommodation, infrastructure and services and has the greatest impact on host communities ▪ Heavy investments tend to be made in international airports, national airlines, roads and telecommunications while the less glamorous elements of tourism infrastructure such as water and sewerage services are often neglected <p><i>Ecotourism</i> can offer a sustainable alternative to overexploitation of resources and destructive consumptive uses. However, some potential problems include:</p> <ul style="list-style-type: none"> ▪ By attracting attention to the resources, ecotourism development can create ever-greater demand for access and use and may become unsustainable if visits are not monitored and managed ▪ Can create an elitist situation, providing access only to those who can afford it ▪ Economic growth may take precedence over ecological sustainability ▪ Tourist visits can open the door for alien species introduction that subsequently undermines native biodiversity ▪ Sharing of benefits with local communities can be inadequate

CHAPTER TWO: INSTITUTIONAL ARRANGEMENTS

2.1 FRAMEWORK FOR COOPERATIVE GOVERNANCE

The Constitution has created the framework for environmental governance in South Africa, by:

- Creating the right to an environment that is not harmful to health and well being
- Balancing the right to have the environment protected, with an emphasis on promoting valid economic and social development
- Allocating environmental functions to a wide range of government agencies, in all spheres
- Requiring co-operation between government agencies and spheres

The Department of Environmental Affairs and Tourism (DEAT) thus shares the environmental function with many departments, across all spheres of government. As lead agent in environmental governance, DEAT is responsible for:

- Establishing national environmental norms and standards
- Ensuring compliance with national policy, laws, norms and standards on environmental management
- Establishing procedures to review the environmental impacts of all government policies, plans and programmes
- Ensuring compliance with environmental norms and standards
- Facilitating co-ordination of environmental functions of organs of state.

NEMA was promulgated within the framework of the Constitution and reinforces the constitutional basis of co-operative governance in the field of environmental management. Co-operative governance recognises the distinctive character of each sphere of government but also the interdependent and interrelated nature of its relationships with other spheres of government.

To function effectively, cooperative governance requires a balanced relationship in which all spheres of government and all organs of the state retain their own unique character but do not function totally independently of the other spheres – they participate and cooperate in mutual and reciprocal relationships.

Capacity development of provincial and local spheres is an important aspect of cooperative governance. The spheres of government closest to the people must be empowered to enable them to put people and their needs at the forefront of environmental management and enable them to participate in environmental governance in an open, transparent and accountable manner.

In Chapter 2 of NEMA, provision is made for the establishment of institutions that would play a significant role in environmental management including the National Environmental Advisory Forum and the Committee for Environmental Coordination.

Chapter 3 of NEMA provides extensive procedures for co-operative governance as well as mechanisms for co-ordination and alignment of these functions for example EMPs and EIPs. The purpose of these plans is to spell out how the various departments will ensure that their policies, plans and programmes and the exercise of their powers that may affect the environment, will comply with the principles, national norms and standards for the protection of the environment.

The lead agent role of the Department is primarily effected through these institutions and co-operative governance procedures

2.2 EXTERNAL ARRANGEMENTS FOR CO-OPERATIVE GOVERNANCE

This section looks at arrangements for co-operative governance for both impacting priority functions and environmental management functions. Detailed information on co-operative governance arrangements is provided in the separate EMP and EIP chapters. See diagrams 1 and 2 at the end of this chapter for a visual depiction of key institutional arrangements.

2.2.1 INSTITUTIONAL RELATIONSHIPS WITH NATIONAL DEPARTMENTS

The Committee for Environmental Co-ordination (CEC) is a key structure through which DEAT interacts with national Departments. In addition to the CEC, specific functions have their own structures and programmes through which co-operative governance is promoted.

The CEC is established in Chapter 2 of NEMA, and consists of the Directors-General of 10 national departments, the Heads of Department of Provincial Environmental Departments and representation from organised local government. It is chaired by the Director-General of the Department of Environmental Affairs and Tourism and meets quarterly.

Functions of the CEC include investigating and making recommendations on:

- Harmonisation of environmental functions
- The assignment and delegation of environmental functions
- Environmental implementation and management plans submitted by scheduled departments
- Single point entry system for authorisations concerned with environmental protection
- Application of integrated environmental management
- Compliance with environmental management principles (in chapter 2 of NEMA)
- Law reform and compliance with environmental management principles

The CEC is becoming a critical structure for government co-ordination on high profile environmental initiatives.

There are two sub-committees under the CEC:

- Law Reform sub-committee
- EIP and EMP sub-committee

Law Reform Sub-Committee

The law reform sub-committee is required to give effect to the CEC's law reform function, and has adopted criteria, conditions and a process for referring legislation to the CEC in terms of sections 7(3)(h) and 24(4) of NEMA.

Important functions of the CEC in respect of law reform include:

- Section 7 (3) (h): Endeavouring to ensure compliance with the principles in section 2 by making recommendations, requiring reports from its members and advising government on law reform
- Section 24 (4): Evaluation of the regulations on impact management procedures, prescribed under section 24 (3) b) of the Act. The Committee's brief is described in section 24 (4).

EIP/EMP Sub-Committee

The EIP/EMP sub-committee gives effect to the CEC's environmental management and implementation plan function. It scrutinises every EIP and EMP and makes recommendations to the CEC on adoption or the extent to which the EIP/EMP fails to comply with NEMA principles; the purpose and objectives of EIPs; and any relevant EMP. This sub-committee has developed guidelines for the evaluation of the content of EIPs and EMPs.

2.2.2 INSTITUTIONAL RELATIONSHIPS WITH PROVINCIAL COUNTERPARTS

2.2.2.1 Constitutional framework

The environment is an area of concurrent national and provincial legislative competence in terms of Section 4 of the Constitution (Act 108 of 1996). Areas of concurrent competence are contained in Schedule 4 and areas of exclusive provincial competence in Schedule 5.

Schedule 4: Functional areas of concurrent national and provincial legislative competence (specific to the environment):

Part A

Administration of indigenous forests
 Disaster management
 Environment
 Nature conservation (excluding National Parks, National Botanical Gardens and Marine Resources)
 Pollution control
 Soil conservation
 Tourism

Part B (Local government matters)

Air pollution
 Local Tourism
 Building regulations
 Water and sanitation services
 Municipal planning

Schedule 5: Functional areas of exclusive provincial legislative competence (specific to the environment):

Part B (Local government matters)

Noise pollution

Refuse removal, refuse dumps and solid waste disposal

A provincial executive is responsible for implementing all national legislation which falls in an area listed in Schedule 4 (unless the Constitution or an Act of Parliament provides otherwise). National Government is required to monitor and oversee the implementation of delegated legislation by provinces.

2.2.2.2 DEAT-provincial environmental department interaction

Interaction with provinces takes place through the MINTEC and its working groups. Provincial departments also participate in a range of function specific structures and projects.

MINMEC, MINTEC and MIPTEC

MINMEC Environment and MINMEC Tourism are structures set up to facilitate co-ordination and decision-making between the national DEAT minister and relevant provincial MEC's. MINTEC (Environment) and MIPTEC (Tourism) are technical structures set up to facilitate co-ordination between the National Department of Environmental Affairs and Tourism, and the relevant Provincial departments with environmental and tourism functions.

Three Working Groups have been established under the Environment MINTEC as follows:

- Biodiversity and Heritage Working Group I (Technical)
- Impact Management Working Group II (Technical - including pollution and waste management)
- Planning and Co-ordination Working Group III (Cross-cutting issues)

The needs of Working Groups I and II in respect of crosscutting issues are co-ordinated and addressed by the Planning and Co-ordination Working Group III.

Terms of reference have been developed for the Planning and Co-ordination Working Group. Terms of reference for the Impact Management Working Group and the Biodiversity and Heritage Working Group are still to be finalised.

Planning and Co-ordination Working Group

Capacity building and Environmental Education

- To develop national strategies for, and monitor implementation of environmental capacity building, environmental education and awareness programmes
- To follow-up on requests by HOD / MINTEC on issues relating to capacity building and environmental education
- To co-ordinate and steer donor funded programmes, such as the DEAT /DANCED programme.

State of the Environment Reporting

- To advise DEAT on development of the State of the Environment Reporting Programme and to assist with identification of information and data needs
- To Evaluate and amend the State of Environment Report and to contribute to the development of sustainable development indicators

Agenda 21 implementation

- To provide a platform for engagement with provinces on content preparations for the World Summit on Sustainable Development
- To provide a platform for debate and input on the National Strategy for Sustainable Development, and linkages with the Environmental Implementation and Management Plans
- To co-ordinate government inputs for the Annual Performance Report on Sustainable Development in terms of the National Environmental Management Act
- To co-ordinate government inputs for the national report to the commission for Sustainable Development

2.2.3 STRUCTURES FOR INTERACTION WITH NATIONAL DEPARTMENTS AND PROVINCES

2.2.3.1 Environmental Management Functions Structures (EMP)

The following table provides information on key co-operative governance structures led by DEAT. The Environmental Management Plan chapter provides specific and detailed information on all co-operative governance interactions.

Table: Environmental Management Functions Structures (EMP)

FUNCTION	INSTITUTIONAL ARRANGEMENTS
<i>Environmental Quality and Protection</i>	
Integrated Pollution Prevention and Waste Management	The work of this function is done primarily through the MINTEC Impact Management Working Group and project specific committees
Air Quality Management	<u>Air Quality Liaison Committees</u> have been established in 15 major industrial areas. Industry, local government and provincial environmental departments participate. The Committees provide a forum for industry to report on performance and for the public to lodge complaints and challenge industry. The Committees run the air quality monitoring networks.
Global Climate Change	<p><u>National Committee on Climate Change (NCCC)</u> advises and consults the DEAT minister on matters relating to national responsibilities with respect to climate change, in particular in relation to the United Nations Framework on Climate Change and the Kyoto Protocol. Relevant national and provincial departments are represented on this Committee.</p> <p><u>Montreal Protocol Working Groups</u> have been formed to address specific issues relating to ozone depleting substances: refrigeration/air conditioning; methyl bromide; aerosols; solvents; mining; halons; and foam blowing. Industries participate with DEAT in these working group meetings. Meetings are called on an ad hoc basis as new developments emerge.</p> <p><u>CFC task force</u> looks at the importation of ozone depleting substances. Both national DEAT and the department of Trade and Industry participate in this task force. Relevant industries (refrigeration and air conditioning) also participate. The task force meets four times a year.</p>
Hazardous Substance Management	<u>Standing Committee on Environmentally Sound Management of Hazardous Materials (ESMHM)</u> . DEAT is in the process of establishing this Committee to co-ordinate the management of hazardous materials. The following departments should be members: Agriculture, Foreign Affairs, Health, Labour, Provincial Affairs and Local Government, Public Works, Trade and Industry, Transport, and Water Affairs and Forestry. Stakeholders from industry, NGO's and labour should also be part of this Committee.
Environmental Impact Management	The work of this function is done through the MINTEC Impact Management Working Group.
<i>Biodiversity and Heritage</i>	
Biodiversity Management	The work of this function is done through the MINTEC Biodiversity and Heritage Working Group and project specific committees
Cultural and Natural Resource Management	<p><u>Convention to Combat Desertification Steering Committee</u>. The Committee meets four times a year and attends to all matters falling under the Convention to Combat Desertification. The following national Departments participate: Environmental Affairs and Tourism, Foreign Affairs, Agriculture, Land, Water and Forestry. The Environmental Monitoring Group also participates.</p> <p><u>South African World Heritage Convention Committee</u>. This Committee identifies potential World Heritage Sites; participates in the SA World Heritage Convention Committee; and implements the World Heritage Convention Act and Regulations</p> <p>The <u>Trans-Frontier Conservation Areas Inter-Departmental Technical</u></p>

FUNCTION	INSTITUTIONAL ARRANGEMENTS
	<u>Committee</u> is in the process of being formed by DEAT. The Committee will initially focus on the development of the Gaza/Kruger/Gonarezhou TFCA and will consist of the following members: national Departments of Forestry, Land, Safety and Security; the provincial environmental departments of Mpumalanga, Northern Province; and Kwa-Zulu Natal; and the Peace Parks NGO.
<i>Marine and Coastal Management</i>	
Management of Coastal Resources	<p>A sub-committee of the CEC will be established to ensure policy implementation is co-ordinated at national and provincial levels. National and provincial government departments responsible for coastal management will participate.</p> <p><u>Coastal Working Groups</u> chaired by provincial lead agents for coastal management promote co-ordination between provincial lead departments and other departments responsible for coastal management. Advise provincial lead department on policy implementation. Increase dialogue, co-operation, co-ordination and integration between key governmental and non-governmental role players in the province.</p>
Antarctica and Islands	<u>Prince Edward Islands Management Committee (PEIMC)</u> . Meets formally twice a year. Members include: Departmental, Universities and co-opted members.
<i>Environmental Planning and Co-Ordination</i>	
Environmental Monitoring and Reporting	The work of this function is done through the relevant MINTEC Planning and Co-ordination Working Group
Environmental Capacity Building	The work of this function is done through the MINTEC Planning and Co-ordination Working Group
Law Reform, Planning and Conciliation	The work of this function is done through the CEC EIP/EMP Sub-committee and the CEC Law Reform Sub-committee

2.2.3.2 Environmental Impacting Priority Functions Structures (EIP)

Table: Environmental Impacting Priority Functions (EIP)

FUNCTION	INSTITUTIONAL ARRANGEMENTS
<i>Mariculture</i>	<p><u>Mariculture Planning Committee</u></p> <p>This Committee has recently been formed. It is responsible for developing a national plan for the mariculture industry. The Committee is made up of interested and affected parties including industry and NGOs. The management of the environmental impacts of mariculture will be considered in this national plan.</p>
<i>Tourism</i>	<p>The <u>Tourism MINMEC</u> provides the forum through which the Tourism function co-operates with provincial counterparts on tourism development. In addition, the International Relations, Peace and Security Cluster Group has a <u>Tourism Economic Development Sub-Committee</u> which promotes tourism economic development.</p> <p>There is no formal structure to manage the impacts of tourism on the environment together with provincial and local governments as well as the tourism industry. It is intended that Tourism's <i>Unblocking Strategy</i> will make provision for more formal co-operation in this regard.</p> <p>The Tourism function participates in tourism development projects and environmental impacts are considered on a project-by-project basis.</p>

2.2.3 INSTITUTIONAL RELATIONSHIPS WITH LOCAL GOVERNMENT

2.2.3.1 Constitutional, policy and legal framework

Constitutional framework

The Constitution provides a clear mandate for local government to take on environmental management responsibilities. Section 152(1) states that the objectives of local government include "...sustainable provision of services to communities...and promoting a safe and healthy environment." The principle of co-operative government is introduced requiring the different spheres of government to co-operate and consult with one another to ensure effective governance.² Specifically, Part B of Schedule 4 and 5 make provision for specific local government environmental matters namely air pollution, noise pollution and refuse removal, refuse dumps and solid waste removal.

The legislative competence of provinces over local government matters contained in Schedule 4 and 5 is limited to:

- Providing for the monitoring and support of local government in the province; and
- Ensuring that municipalities perform effectively in respect of matters listed in Schedules 4 and 5 by regulating the exercise by municipalities of their executive authority.

National and provincial government may not compromise or impede a municipality's ability or right to exercise its powers or perform its functions, but are required by legislative or other measures to support and strengthen the capacity of municipalities to manage their own affairs and perform their functions.

The ability of NEMA to deal with schedule 5 areas of competence depends on the extent to which a case can be made that issues such as noise pollution require inter-provincial regulation involving a set of national standards.

Policy framework

In the White Paper on Integrated Pollution and Waste Management, 2000 Chapter 6 Section 6.3.2 it states that "Municipalities will be responsible for providing waste management services, and managing waste disposal facilities. Specific functions to be carried out by municipalities will include:

- Compiling and implementing general waste management plans, with assistance from provincial government
- Implementing public campaigns
- Participation in the collecting data and implementing the action plan for the Waste Information Systems (WIS)
- Providing general waste collection services and managing waste disposal facilities within their areas of jurisdiction
- Implementing and enforcing appropriate waste minimisation and recycling initiatives, such as promoting the development of voluntary partnerships with industry, including the introduction of waste minimisation clubs.
- Where possible, regional planning, establishment and management of landfill sites, especially for regionally based general waste landfills."

In the White Paper For Sustainable Coastal Development For South Africa, 2000, local authorities will be invited to participate in local coastal forums which will be set up to provide advice on practical coastal management issues. Local authorities should use the goals and objectives provided in Chapter 7 of the White Paper as guidelines for coastal planning and management.

The White Paper on Environmental Management Policy, 1998, calls for the effective integration of environmental considerations into all policies plans and programmes, this includes the Integrated Development Plans of local government. The White Paper sets out clear objectives under Goal 3: *Holistic and Integrated Planning and Management* of how this can be achieved:

- Development of guidelines and other management instruments for integrating environmental concerns into the IDP's
- Develop standards for environmental management systems for activities that impact on the environment

² In Section 152, Chapter 7 on local government, the Constitution states the objectives of local government as follows:

- (a) To provide democratic and accountable government for local communities.
- (b) To ensure the provision of services to communities in a sustainable manner.
- (c) To promote social and economic development.
- (d) To promote a safe and healthy environment.
- (e) To encourage the involvement of communities and community organisations in the matters of local government.

- Develop indicators to measure performance of among other local environmental policies

The 1998 *White Paper on Local Government* (section 2.2) states: "Planning for environmental sustainability is not a separate planning process, but is an integral part of the process of developing municipal Integrated Development Plans (IDPs)". It further states that: "this White Paper establishes the basis for a new developmental local government system which is committed to working with citizens, groups and communities to create sustainable human settlements which provide a decent quality of life and meet the social, economic and material needs of communities in a holistic way".

The *White Paper On The Conservation And Sustainable Use Of South Africa's Biological Diversity* (1997) envisages that: Local Government would have to apply the biological diversity principles, especially the precautionary principle. Biodiversity management plans regarding protected areas, setting standards and monitoring mechanism would have to be developed.

Legal framework

The National Environmental Management Act, 1998 (Act 107 Of 1998)

Decision-making (NEMA Section 2): Environmental management principles apply to the actions of all organs of state that may significantly affect the environment. Municipal Councils must be able to show how the principles were applied in a decision or action that may significantly affect the environment.

Decision-making and conflict management (NEMA Section 17(1)): Enables appointment of conciliator/mediator. A Municipal Council dealing with a dispute/appeal in a decision regarding protection of the environment, may appoint a conciliator / mediator on terms and conditions determined by the Council.

Planning (NEMA Section 16(4)(a)): Compliance with provincial Environmental Implementation Plans (EIPs). The provinces are presently preparing EIPs that describe:

- How policies, plans and programs that may significantly affect the environment, will comply with the environmental management principles and any environmental norms and standards
- How functions will be exercised to ensure compliance with relevant environmental laws.

Application of environmental management principles in preparation of the IDPs and LDOs. (NEMA Section 16(4)(b)). Municipalities are legally required to comply with the sustainable development principles as set out in Section 2 of NEMA. The environmental management principles must be applied in the preparation of any policy, programme or plan, including Integrated Development Plans and Land Development Objectives.

Access to environmental information and protection of whistleblowers (NEMA Section 31): Every person is entitled to have access to information which relates to the state of the environment. Municipalities will have to provide and develop environmental monitoring, assessment and reporting mechanisms to provide, on a regular basis, information on the state of the environment, furthering informed decision-making. This is currently voluntary. However, consideration is being given to amend NEMA to make reporting compulsory for bigger municipalities

Environmental co-ordination (NEMA Section 8(1)(l)). Organised local government is a member of the Committee for Environmental Co-ordination (CEC). Section 7 of NEMA establishes the CEC to promote integration and co-ordination of the environmental functions of organs of state.

Environmental co-operation (NEMA Section 35): Environmental Management Co-operation Agreements. These provisions enable a municipality to enter into an environmental management co-operation agreement with any person or community, for the purpose of promoting compliance with environmental management principles. (for example with industry, to reduce air pollution)

International obligations and agreements (NEMA Section 26): Inputs will be required for the Minister's annual Performance Report to Parliament on sustainable development in the context of Agenda 21. Agenda 21 is the first UN global plan of action to provide a specific mandate to local government. Local Government inputs for this report will be done through the provinces and/or SALGA. First report to be submitted to Parliament by May 2001.

Local Agenda 21 is the global process used to translate Agenda 21 into actions at the local level. This is important because the commitment of local government to work in partnership with communities is essential for the implementation of more than two thirds of the objectives as set out in Agenda 21. Chapter 28 of Agenda 21 sets out the importance of local authorities in the global move towards sustainability. It is the first United Nations Plan of Action with a specific mandate to local government. Local Agenda 21 in South Africa

is promoted as an integral part of current local government legislation. For example, the Municipal Systems Act imposes on local government the responsibility for promoting a safe and health environment and giving effect to the principles of sustainable development. Local Agenda 21 takes local government planning frameworks one step further by adding long-term value to planning through aiming towards sustainable development. Local Agenda 21 is underpinned by seven international local level sustainable development principles³. It tackles environment and development as an inter linked issue which is key for the alleviation of poverty.

Integrated Environmental Management (NEMA Section 24). Local Government is required to minimise the negative impacts and maximise the social and environmental benefits of development. Until new regulations have been developed, Section 21, 22 and 26 of Environment Conservation Act, 1989 (Act No 73 of 1989) are applicable. They confer on the local authorities the responsibility of co-operating with the DEAT and the provincial environmental authorities regarding the application of the EIA regulations published on 1997/09/05 regarding activities listed in the relevant Schedule. Local authorities with sufficient capacity may apply, through the relevant provincial authority, for delegated authority to implement the EIA regulations with regard to specific listed activities.

Marine Pollution (Control & Civil Liability) Act 6 of 1981. The Act confers on the relevant local authorities the responsibility of co-operating with the DEAT in activities relating to the protection and clean up of the shorelines in the event of an oil spill incident. Coastal Oil Spill Contingency Plans for major urban areas to be completed by the end of the current financial year

Sea Shore Act (Act 21 Of 1935): Coastal Management Plans. New legislation is being drafted to give legal effect to the White Paper for Sustainable Coastal Development for South Africa, April 2000. At present the Sea Shore Act (Act 21 of 1935), administered by the relevant Provincial department, empowers local authorities to make regulations concerning the use of the sea and seashore. Coastal management issues must be considered in local integrated planning. The Sea Shore Act regulates management of beaches and recreational activities.

Local Government Municipal Systems Act (2000). The Act defines development as "sustainable development" as set out in Section 1 of NEMA. In this Section, sustainable development means "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". It further states in Section 21(1)(a) of the Municipal Systems Act that municipal planning needs to be developmentally oriented and ensure that development is done in a sustainable manner as set out in Section 152 of the Constitution

2.2.3.2 Structures and programmes to facilitate co-ordination between DEAT and local government

Co-coordinating Structures

Table: Local government coordinating structures

COMMITTEE	LOCAL GOVERNMENT INVOLVEMENT	COMMENTS
Committee for Environmental Coordination (CEC)	The Department of Provincial and Local Government (DPLG) and the South African Local Government Association (SALGA) are members of the CEC representing local government	SALGA and DPLG do not regularly attend the CEC. This is to be addressed through bi-laterals

Programmes

In order to enable local governments to give effect to the environmental management provisions in policy and legislation, DEAT has introduced the following programmes:

3

1. Integration of social, economic and environmental issues
2. Multi-sectoral approach – involve all sectors of the community
3. Concern for the future – taking a longer term view
4. Recognising and working within ecological limits
5. Local authorities working through partnerships with civil society
6. Linking local issues to global impacts
7. Equity, justice and accountability

Table: Local government programmes

PROGRAM AREA	LOCAL GOVERNMENT INSTITUTIONAL ARRANGEMENTS/RELATIONSHIP	COMMENTS
Local Agenda 21 (NEMA Section 16(4)(b))	<p>DEAT has recently negotiated a Memorandum of understanding with SALGA to establish a National Local Agenda 21 Forum. This MOU will be formalised in March 2001 when a transfer of seed funding will be made to SALGA.</p> <p>The function of the forum is to:</p> <ul style="list-style-type: none"> Promote the implementation of both Agenda 21 and the Habitat Agenda in South Africa by providing an interactive forum and designing relevant awareness raising and capacity building initiatives Develop programmes to assist the implementation of both these Agendas in the South African context (e.g. through the establishment of national and international twinning arrangements) Co-ordinate stakeholder comment on the implementation strategies of the two agendas Investigate opportunities for complementary monitoring, reporting and evaluation of the two agendas. <p>The memorandum of understanding with SALGA is based on two areas of work:</p> <ul style="list-style-type: none"> SALGA launching and providing a secretariat for the Local Agenda 21 Forum / Multi Stakeholder bi-annual meetings and its related working Groups. SALGA being responsible for ensuring that needs identified by the Forum (e.g. awareness raising programmes), are met in order to assist local government to take leadership in mainstreaming sustainable development into everyday activities. 	<p>This will be a multi-stakeholder forum with working groups, meeting on a regular basis throughout the year. It will provide a discussion forum for local government on the local implementation of sustainable development as required by the constitution, NEMA, the Municipal Systems Act and as promoted in Agenda 21. This Forum will also play an important role in the local government preparations for the World Summit on Sustainable Development in 2001.</p>
Integrated Pollution and Waste Management White Paper on Integrated Pollution and Waste Management for South Africa, May 2000	<p>The role of local government at this stage is very limited due to a lack of capacity. National and provincial government assist with building capacity within local government on Integrated Pollution and Waste Management.</p> <p>In addressing problem areas in terms of local integrated waste management, ad hoc activity driven meetings are held. These meetings include local government, DEAT, Province, SALGA and the Department of Provincial and Local Government (in terms of their co-ordination of the municipal infrastructure funding.)</p> <p>Courses on Solid Waste Management Planning (SWMP) will be held this year for local government officials</p>	<p>There are no formal institutional arrangements with local government, however a need does exist to deal with the lack of capacity in Provincial government to address the waste management imperatives at local government level.</p>
Access to environmental Information NEMA Section 31	<p>Selected local governments formed part of the development of the Guidelines for the State of Environment Reporting, which will be available in April 2001</p> <p>DEAT is currently involved in the expansion of the Cities Environment Report on Internet (CEROI) city initiative through co-ordinating the development of City State of Environment Reports. These are based on the Cities Environment Report on Internet (CEROI) publicity software for Port Elizabeth and Kimberley. Capacity building and training will form part of this initiative.</p>	<p>Certain provincial governments will also form part of the CEROI expansion program.</p>
Integrated Environmental Management NEMA, Section 24	<p>In terms of NEMA the concurrent responsibility lies with province unless otherwise agreed and delegated to local government.</p>	<p>There are no formal institutional arrangements with local government. Provinces</p>

PROGRAM AREA	LOCAL GOVERNMENT INSTITUTIONAL ARRANGEMENTS/RELATIONSHIP	COMMENTS
	Training on Environmental Impact Assessments (EIA) is currently under development as part of the DEAT Capacity Building Unit program, sponsored by DANCED aimed at training local government. Previous training was done as part of the US EPA training program.	mainly provide capacity building opportunities to local government to build their competency in executing this function.

2.3 PROCEDURES AND MECHANISMS FOR CO-OPERATIVE GOVERNANCE

The Department has conceptualised, and is implementing a coherent and strategic process of planning for co-operative environmental governance, and setting and monitoring of targets for sustainable development. Key components of this system include:

- Co-ordination of environmental functions across all spheres of government. This is achieved through the Environmental Implementation and Management Plans, provided for in chapter 3 of NEMA
- Setting of targets for sustainable development in the National Strategy for Sustainable Development, currently being prepared as part of South Africa's commitment to implementing Agenda 21
- Monitoring of performance on sustainable development targets by means of the Annual Performance Report on Sustainable Development and annual reports on Environmental Implementation and Management Plans
- Integration of environmental targets in local government plans.

Significant progress has been made in each area:

Co-ordination of environmental functions: The Environmental Implementation and Management Plans are central to the system that promotes co-operative governance. Their purpose is to co-ordinate and harmonise the environmental policies, plans and programmes of organs of state, and to provide a basis for monitoring performance on environmental sustainability targets. Scheduled departments whose activities impact on the environment, and provinces must prepare an Environmental Implementation Plan (EIP). Scheduled departments whose activities involve the management of the environment must prepare an Environmental Management Plan (EMP). All plans must be submitted to the CEC by the end of March 2001. By the end of 2000, the following EIPs and EMPs had been evaluated and adopted by the CEC:

- Department of Land Affairs
- Department of Defence
- Department of Minerals and Energy
- Department of Housing

Setting targets for sustainable development as part of preparing a National Strategy for Sustainable Development (NSSD). DEAT is presently co-ordinating the process, and will draw on the active participation of other government departments, industry and civil society groups. The process provides the opportunity for all stakeholders to:

- Strengthen and build upon existing processes towards sustainable development by collating and reviewing current policies and programmes towards sustainable development, identifying weaknesses and gaps, and identifying priority areas of action
- Clearly demonstrate and inform the linkages between the management of environmental resources and poverty alleviation, job creation and human health and well-being.

Monitoring performance on sustainable development targets: Key mechanisms for performance monitoring include the Annual Performance Report on Sustainable Development (in terms of Section 26 of NEMA); annual reports by scheduled departments on implementation of EIPs and EMPs; and reports to the UN Commission on Sustainable Development.

2.4 CAPACITY FOR CO-OPERATIVE GOVERNANCE

2.4.1 CO-OPERATIVE GOVERNANCE CAPACITY GAPS

In general, funds and personnel are not sufficient. Programmes are supplemented by donor funds and are being used to outsource primary functions. There are a number of structures and programmes, some led by DEAT and some requiring the participation of DEAT personnel. However, because of the limited numbers of personnel, it is not feasible for DEAT to participate fully in all these structures and programmes. An audit of co-operative governance structures and programmes is needed to inform the streamlining and integration of multiple, often over-lapping institutional arrangements.

2.4.2 CAPACITY BUILDING PROGRAMMES TO STRENGTHEN CO-OPERATIVE GOVERNANCE

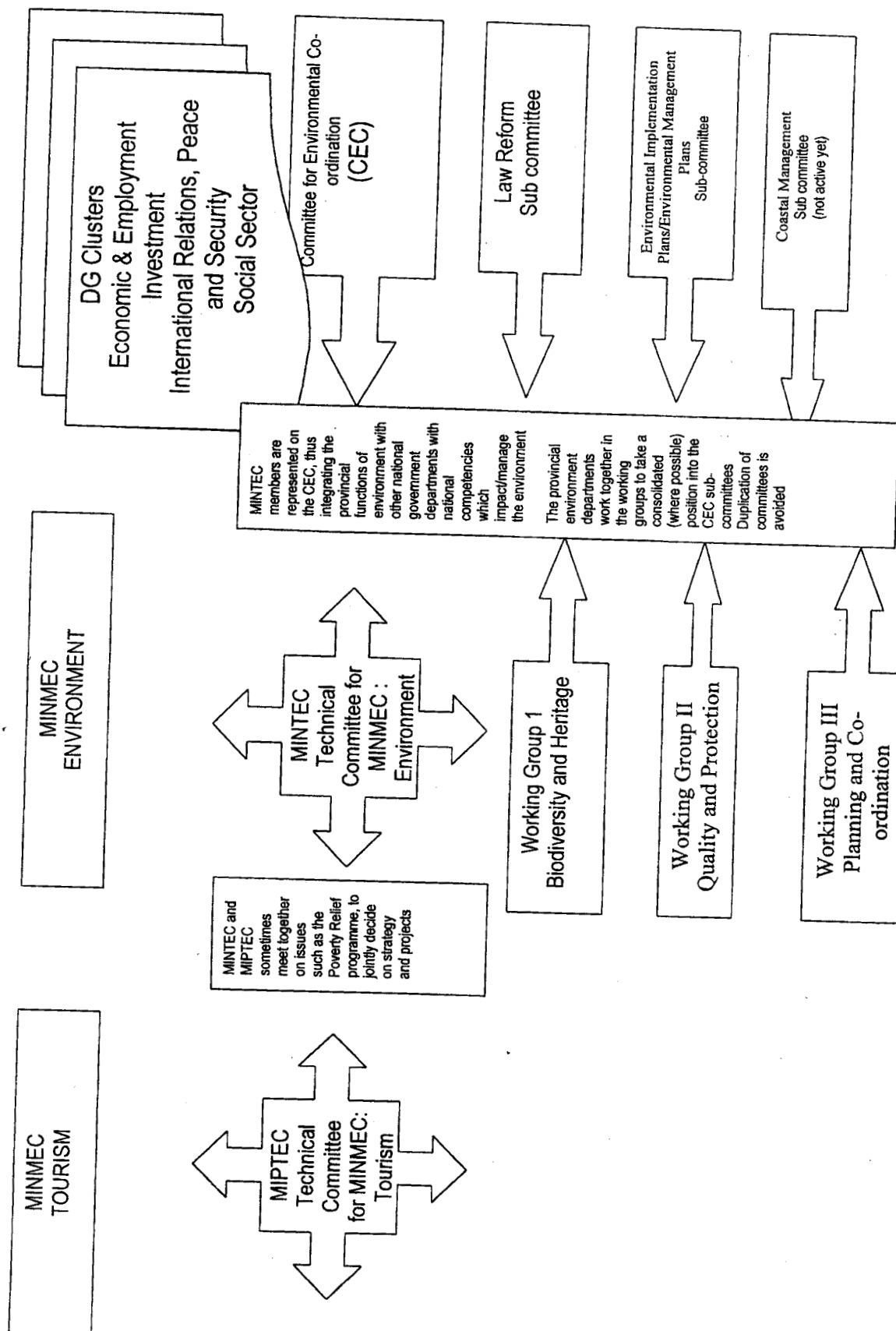
Local government capacity building: The Department is developing a support programme that will provide environmental technical expertise to local government thereby ensuring that local governments have the necessary capacity to:

- Analyse the economic potential and sensitivity of environmental resources within the municipal area
- Assess the impacts of development activities on the environment
- Set the necessary targets and objectives for environmentally sustainable service delivery.

This capacity building programme will be implemented in 2001/02.

Competency profiling workshops: These workshops will begin to address the need for clarification of national, provincial and local environmental competencies. A skills audit of national personnel will be part of this exercise which is to be completed in 2001.

2.5 SUMMARY OF INSTITUTIONAL MECHANISMS FOR INTER GOVERNMENTAL AND DEPARTMENTAL CO-OPERATION



CHAPTER THREE: ENVIRONMENTAL MANAGEMENT PLAN

This chapter provides specific information for DEAT's Environmental Management Plan. The following information is provided for each environmental management function:

- Description of environmental management function
- Description of specific environmental laws, norms or standards applied by this function
- Description of extent of compliance
- Constraints or limitations with respect to ensuring compliance
- Programmes for implementation/ensuring compliance
- Arrangements for co-operation.

3.1 ENVIRONMENTAL QUALITY AND PROTECTION

The functions of Environmental Quality and Protection are to:

- Implement the Integrated Pollution and Waste Management Policy for South Africa
- Improve waste service provision and recycling by municipalities
- Initiate community waste and pollution management initiatives
- Develop one integrated pollution and waste management permitting and licensing system
- Service and implement international Conventions

3.1.1 INTEGRATED POLLUTION PREVENTION AND WASTE MANAGEMENT (IPPWM)

3.1.1.1 *Description of Environmental Management Functions*

- Prevent, reduce and manage pollution
- Increase recycling and reclaiming of waste
- Promote cleaner production technology in key polluting sectors
- Create jobs

3.1.1.2 *Description of Specific Environmental Laws, Norms or Standards Applied by This Function*

National Environmental Management Act 107 of 1998: The following NEMA principles are applied by this function - Section 2(4):

- (a) Sustainable development requires the consideration of all relevant factors including the following:
- (ii) That pollution and degradation of the environment are avoided, or where they can't be altogether avoided, are minimised and remedied
- (iv) That waste is avoided, or where it cannot be altogether avoided, is minimised and remedied
- (v) That the use and exploitation of non-renewable resources is responsible and equitable and takes into account the consequences of the depletion of the resource.
- (e) Responsibility for the environmental health and safety consequences of a policy, programme, project, product, process, service or activity exists throughout its life cycle.

Environmental Conservation Act 73 of 1989: Sections 19 and 19a provide for a general prohibition against littering and the removal of litter. Section 20 of the Act deals with waste management, including the establishment and operation of waste disposal sites. Section 24 of the ECA, allows the Minister to make regulations with regard to waste management.

Plastic Bag Regulations (May 2000) have been promulgated under this Act. The aim of the regulations is to restrict the production of non-reusable plastic shopping bags and to promote re-use and recycling. The regulations place certain prohibitions on the supply of carry bags

3.1.1.3 *Description of Extent of Compliance*

While information is currently largely not available to determine the extent of compliance, on the basis of Section 40 of NEMA DEAT has initiated the appointment of a unit (the Rapid Reaction Environmental Enforcement Unit) that will ensure the implementation of Chapter 7 of NEMA on compliance, enforcement and protection.

POLICY AND LEGISLATIVE PROVISIONS	EXTENT OF COMPLIANCE
<i>National Environmental Management Act 107 of 1998</i>	
NEMA Principles Integrated Environmental Management (Chapter 5) Duty of Care	<ul style="list-style-type: none"> Systems to gather information currently not in place. Compliance monitoring will be addressed through the National Waste Management Strategy.
<i>Environmental Conservation Act 73 of 1989</i>	
Prohibitions against littering and removal of litter Waste management including waste disposal sites	<ul style="list-style-type: none"> In the past, waste management was not afforded the priority it warrants and consequently, insufficient funds and human resources were allocated to this function. In many instances, this neglect has resulted in a lack of long-term planning, information, appropriate legislation and capacity to manage the waste stream. A lack of government capacity means that the enforcement of existing legislation is frequently unfocused especially with regard to waste disposal.

3.1.1.4 Constraints and Limitations With Respect To Ensuring Compliance

CONSTRAINTS AND LIMITATIONS	ACTIONS TO ADDRESS THESE
Finalising agreements between national, provincial and local government departments on the effective allocation of responsibilities and resources for the management of environmental issues.	<ul style="list-style-type: none"> Finalise agreements to clarify roles and responsibilities
Securing approval from the national fiscus and identifying possible alternative mechanisms for financing the IPWM strategy that are feasible and politically acceptable	<ul style="list-style-type: none"> A project on economic instruments has been initiated to look at market-based instruments for possible funding of the strategy
The availability of sufficient capacity within government. There is presently lack of experienced staff with appropriate skills applicable to integrated waste management at DEAT	<ul style="list-style-type: none"> Capacity building for integrated waste management will be done through the Capacity Building Unit
Reaching agreement as soon as possible on the environmental law reform process, commencing with the work, and ensuring that the drafting team of any resulting legislation strictly adheres to the principles and proposed actions arising from the National Waste Management Strategy	<ul style="list-style-type: none"> Ongoing as part of the Law Reform Process
Implementing effective mechanisms for public participation and partnerships	<ul style="list-style-type: none"> All programmes will involve interested and affected parties and co-operation with institutions and industry has been forged in various areas affecting them

3.1.1.5 Programmes for Implementation/Ensuring Compliance

Policy on Integrated Pollution and Waste Management, March 2000: A National Waste Management Strategy (NWMS), together with a number of action plans was developed at the end of 1999, in collaboration with the Department of Water Affairs and Forestry. Five-year priority action plans have been developed for the following key elements of the strategy: Integrated Waste Management Planning; Waste Information Systems; General Waste Collection; Waste Minimisation and Recycling; and Capacity Building, Education, Awareness, and Communication.

Legislative requirements and regulations

Regulations may be introduced for:

- A hazardous substances classification system
- The safe handling and transportation of hazardous waste
- Waste collection
- Waste minimisation and recycling:
- Waste Information System and pollutant release and Transfer Register
- An administrative system.

PRIORITY PROGRAMMES 2000 – 2004	OUTPUTS	TIMEFRAME
Implement the National Waste Management Strategy	Regulations on Integrated Waste Planning promulgated	2001
	Waste Information System established and operational	2003
	Waste collection services in previously under-served areas improved	2004
	Projects implementing climate change programmes (energy-efficiency, low-smoke coal, monitoring) initiated	2002
	3 recycling initiatives legislated and pilots implemented	2003
	Capacity building, education, awareness and communication programmes developed and implemented	2001 – 2004

3.1.1.6 Arrangements for Co-operation

The work of this function is conducted through the MINTEC Impact Management Working Group. The primary focus of the IPWM function is industry. Industry is a major contributor to pollution and waste and a change of attitude by industry from end-of-pipe treatment to prevention and minimisation can have a significant effect on the efficient use of resources and the amount of waste that is disposed of at landfill sites. The Integrated Waste Management Strategy is in the process of being developed. The following table provides an indication of the different co-operative governance partners and their proposed roles in implementing the strategy in partnership with DEAT. Many of these co-operative governance arrangements will take place at project level.

GOVERNANCE PARTNERS	NATURE OF CO-OPERATION	ARRANGEMENTS
Department of Finance	Will participate in the investigation into appropriate funding mechanisms for and financing of Waste Minimisation and will make the final decision regarding the possible introduction of economic instruments to promote waste minimisation	<ul style="list-style-type: none"> ▪ Meetings on Economic Instruments project and Waste Discharge Charge System
Department of Health (DOH)	<p>To be involved in initiatives, such as demonstration projects, aimed at minimising the generation of certain medical wastes</p> <p>Health inspectors at local level are concerned with domestic waste</p>	<ul style="list-style-type: none"> ▪ When any waste facilities are being developed, including land-fill sites, a steering committee is established and Health participates
Department of Minerals and Energy (DME)	<p>To be involved in initiatives relating to minimisation of mining, coal combustion and radioactive wastes.</p> <p>To be involved in integrating energy efficient measures as part of the development of a national strategy for cleaner production</p>	<ul style="list-style-type: none"> ▪ Bimonthly meetings on Economic Instruments project
Department of Provincial Affairs and Local Government	Municipalities have specific responsibilities in terms of waste management. If DEAT has difficulties liaising directly with municipalities,	<ul style="list-style-type: none"> ▪ Ad hoc, as needed.

GOVERNANCE PARTNERS	NATURE OF CO-OPERATION	ARRANGEMENTS
	<p>the DPLG is the next port of call.</p> <p>DEAT also assists municipalities to access the Infrastructure Development Fund for the purposes of waste management</p>	
Department of Trade and Industry (DTI)	<p>To participate in an inter-departmental working team which will investigate the feasibility of introducing economic instruments to promote waste minimisation.</p> <p>Will also participate in the development and implementation of certain demonstration projects, including the plastic bags issue.</p> <p>May serve as a source of funding for co-operative waste minimisation initiatives.</p> <p>Has an important role to play in technology transfer initiatives.</p> <p>To be involved in investigating the desirability of a National Waste Minimisation Centre</p> <p>DTI assists entrepreneurs in the waste management industry, DEAT provides technical advice</p>	<ul style="list-style-type: none"> ▪ Bimonthly meetings on the Economic Instruments project. ▪ Project Steering Committee Meetings on Cleaner Production projects.
Department of Transport	<p>May be involved in ensuring that statutory controls relating to the transportation of certain industrial wastes do not hinder legitimate efforts to deliver material from waste streams for recovery and re-use</p>	<ul style="list-style-type: none"> ▪ No formally structured co-operation.
Department of Water Affairs and Forestry (DWAF)	<p>Partner with DEAT in NWMS, cleaner production initiatives and waste related issues.</p> <p>Co-operate with DWAF on Section 20 of the ECA regarding land fill sites</p>	<ul style="list-style-type: none"> ▪ Meetings on Waste Discharge Charge System project and on Environmental Management Co-operative Agreements.
Local governments	<p>Will be responsible for general waste management planning including waste minimisation</p> <p>Will be involved in the promotion of initiatives such as Waste Minimisation Clubs</p> <p>Will be active in the collection of data required for the Regional Waste Information System</p> <p>Solid Waste Management Courses are being run at 2 municipalities. From the municipality, the Councillor responsible for environmental matters, heads of public works, cleansing, planning and finance will participate as well as representatives from labour unions and NGO/CBO will participate in these courses. In addition,</p>	<ul style="list-style-type: none"> ▪ Indirect interaction through the provincial departments.

GOVERNANCE PARTNERS	NATURE OF CO-OPERATION	ARRANGEMENTS
	representatives from provincial government, neighbouring municipalities, private sector service providers, academic institutions and other NGO's will also be invited to participate	
Provincial Environmental Departments	<p>Will be responsible for integrated waste management planning including waste minimisation</p> <p>To play a role in the promotion and implementation of a number of waste management initiatives</p> <p>May be involved in Government's Waste Minimisation demonstration project</p>	<ul style="list-style-type: none"> MINTEC Working Group meetings

3.1.2 ATMOSPHERIC PROTECTION AND CHEMICALS MANAGEMENT

3.1.2.1 AIR QUALITY MANAGEMENT

3.1.2.1.1 Description of Environmental Management Functions

- Develop policies, legislation and strategies for the management of air quality in South Africa
- Enforce air quality legislation
- Develop and implement national air quality standards

3.1.2.1.2 Description of Specific Environmental Laws, Norms or Standards Applied by this Function

Atmospheric Pollution Prevention Act 45 of 1965: Part 2 of the Act sets out requirements for the control of noxious or offensive gases resulting from the operation of Scheduled Processes in industry. There are 72 Scheduled Processes in Schedule 2. Certificates are issued which contain requirements specifying minimum norms and standards for the operating of Scheduled Processes. Guidelines for emission limits are specified in the permits allocated by DEAT. These guidelines become enforceable standards in the permit certificate. The national DEAT Chief Air Pollution Control Officer administers this section.

Section 3 deals with Smoke Control by enabling the declaration of smoke controlled areas by local authorities. Local Authorities can apply to the Minister, on a voluntary basis, to declare their area a smoke control area.

Section 4 regulates dust from gold and asbestos waste dumps and is administered by the Government Mining Engineer in the Department of Minerals and Energy.

Section 5 deals with the Control of Motor Vehicle Emissions. Provisions currently only address the use of diesel. The administration of this section is also delegated to local authorities on a voluntary basis.

3.1.2.1.3 Description of Extent of Compliance

LEGISLATIVE PROVISIONS	EXTENT OF COMPLIANCE
<i>Atmospheric Pollution Prevention Act 45 of 1965</i>	
Pollution from industrial processes (Section 2).	<ul style="list-style-type: none"> There are 72 scheduled processes in industry that need certificates and on-going monitoring. 2000 industries are registered with DEAT to operate these scheduled processes (of these, 1 200 are currently operational). South Africa has only 4 regional offices with a staff of two in each one to monitor and police the entire country. With this limited

LEGISLATIVE PROVISIONS	EXTENT OF COMPLIANCE
	<p>capacity, it is, strictly speaking, an impossible task.</p> <ul style="list-style-type: none"> ▪ The procedures for addressing non-compliance by industry are cumbersome and time-consuming. These shortcomings will be reviewed in the new legislation on air quality management. ▪ While there have been some gains in improving air quality, a lack of enforcement capacity within government has led to laxity in compliance by many industries. However, some industries have voluntarily installed air-cleaning equipment that reduces emissions to well below the standard set by DEAT. ▪ Negotiations are underway with refineries on putting in place co-operative agreements in terms of the National Environment Management Act which will entail the operation of ambient and emission monitoring, independent auditing of monitoring results and agreement on emission reduction programmes. ▪ While DEAT may delegate section 2 responsibilities to provinces at their request, there is limited capacity and none of the provinces currently has the expertise to monitor and police air quality. DEAT therefore remains responsible for the administration of section 2 of the Act. The process of developing the necessary infrastructure for the transfer of skills to provinces has stalled due to capacity constraints at the national level and the difficulties in funding the appropriately qualified people to do the job.
Smoke Control (Section 3)	<ul style="list-style-type: none"> ▪ Local authorities have been delegated the administration of this section of the Act. ▪ Compliance is poor. ▪ Historically, the declaration of smoke controlled areas applied to cities and towns. Townships and informal settlement areas were largely excluded. ▪ Social-economic factors such as the high use of fossil fuels for space heating, the non-electrification of areas and the non-affordability of electricity makes the declaration of these areas smoke controlled zones unfeasible.
Dust Control (Section 4)	<ul style="list-style-type: none"> ▪ Although the majority of the gold mine waste dumps have been vegetated, several dumps are still causing dust problems
Motor Vehicle Emissions (Section 5)	<ul style="list-style-type: none"> ▪ Currently only diesel smoke emissions are being enforced by 10 local authorities across the country ▪ Enforcement is not always adequate and this is a problem area

3.1.2.1.4 Constraints and Limitations with Respect to Ensuring Compliance

CONSTRAINTS AND LIMITATIONS	ACTIONS TO ADDRESS THESE
South Africa has only four regional offices, with a staff of two in each one, to monitor and police the entire country	<ul style="list-style-type: none"> ▪ To be addressed as part of the strategy for implementation of the new legislation
Many local authorities nominally collect air quality data. However, of the 94 stations currently measuring sulphur dioxide, 25 stations in 8 towns have no data, or insufficient data. The reason is lack of human capacity. Political commitment at local level is required to maintain air pollution monitoring systems, and formal and informal training of operators is required	<ul style="list-style-type: none"> ▪ A National Database on Air Quality Data is to be established

CONSTRAINTS AND LIMITATIONS	ACTIONS TO ADDRESS THESE
Data from the national sulphur dioxide network are not available as hourly values which are needed to calculate health impacts	▪ Linkages between sulphur dioxide monitors in major cities and industrial areas, which do provide hourly data, will be established
No legislation is in place to monitor and enforce compliance with petrol smoke emissions.	• A study was undertaken to determine the extent of photochemical smoke in South African cities. The recommendations need to be taken forward by DEAT and Department of Minerals and Energy. Standards for emissions for new cars need to be set.

3.1.2.1.5 Programmes for Implementation/Ensuring Compliance

The new air quality management legislation will repeal the whole Air Pollution Prevention Act (or sections thereof) and will provide for the Minister to make regulations on, amongst others, the control of: industrial pollution; pollution from the incineration of general and medical waste; pollution from domestic sources; pollution by dust (mining, road and other construction activities); and pollution by motor vehicle emissions. Provision will also be made for the Minister to declare pollution hotspot areas.

PRIORITY PROGRAMMES 2000-2004	OUTPUTS	TIMEFRAME
Implement the Policy on Integrated Pollution and Waste Management	Amended air quality legislation promulgated	2001/02
	Revised Air Pollution standards developed	2002
	Policy for controlling motor vehicle emissions developed	2002
	Legislative mechanism to improve compliance by all industries implemented	2003
	Emission monitoring system developed	2003

3.1.2.1.6 Arrangements for Co-operation

Liaison committees are in place in the large industrial areas namely Rustenburg, Durban South, Richards Bay, Pallabowra, Vaal Triangle, Kempton Park, Cape Town Refineries, and Middelburg/Witbank. These committees assist DEAT with the monitoring of ambient air quality and manage the consultant or firm that has been appointed by DEAT to run the monitoring network. Local authorities, provincial environmental officials and industry representatives participate in these liaison committees.

GOVERNANCE PARTNERS	NATURE OF CO-OPERATION	ARRANGEMENTS
Local authorities	Administer Parts III and V of Act Those provinces with capacity assist DEAT on an informal basis to monitor and enforce air quality legislation	▪ Liaison committees and ad hoc as needed
Provincial Governments	Concurrent administering of Part II of Act. Provinces have not yet commenced administering their responsibilities DEAT advises provinces on air quality requirements for EIA assessments.	▪ Liaison committees and ad hoc as needed
Dept of Minerals and Energy	Administers Part IV of Act The Act provides for a levy and funding for the rehabilitation of vegetated gold mines. These funds have been transferred to DME for administration by them	▪ Regular meetings as needed ▪ DME runs a Bilateral Committee for Derelict and Ownerless Mines. DEAT is unable to participate due to lack of personnel.

3.1.2.2 GLOBAL CLIMATE CHANGE

3.1.2.2.1 Description of Environmental Management Functions

- Co-ordinate the climate change policy formulation process
- Develop local awareness / education campaigns on climate change and the ozone depletion
- Restrict, and eventually phase-out, the use of ozone-depleting substances (ODS) which have been identified as posing a threat to the ozone layer and are regulated under the Montreal Protocol

3.1.2.2.2 Description of Specific Environmental Laws, Norms or Standards Applied by this Function

Convention for the Protection of the Ozone Layer (Vienna Convention): South Africa acceded to both the Vienna Convention and the Montreal Protocol on 15 January 1990. Since the depletion of the ozone layer is a global problem, and by virtue of this country being a signatory to the Protocol, South Africa has to phase-out all ozone depleting substances (ODS) in line with the requirements of both the Convention and the Protocol. It is important because South Africa imports all the ODS's consumed here and, if provisions are not complied with, trade sanctions in these substances can be applied.

Montreal Protocol on Substances that Deplete the Ozone Layer

South Africa ratified the Montreal Protocol in 1990. Under this Protocol the Parties agree to phase-out the production and consumption of ODS's according to time-scales fixed by the Parties. As signatory to the Protocol, South Africa has a national obligation to implement its requirements to safeguard the ozone layer from complete depletion.

The objectives of the Montreal Protocol are to:

- Ensure that the parties to the Protocol protect human health and the environment against adverse effects resulting in or likely to result from human activities which modify, or are likely to modify, the ozone layer
- Ensure the protection of the ozone layer by taking precautionary measures to equitably control the total global emissions of substances that deplete the ozone layer, with the ultimate objective of totally eliminating them
- Report and send data to the ozone secretariat on the production, imports, exports and consumption of regulated ODS's as collected from dealers, Customs and Excise Department and the Department of Trade and Industry.

There are on-going developments in terms of bringing forward the phase-out dates as determined by the parties. Since 1987, there have been some adjustments and amendments to the Protocol, which have either brought forward phase-out schedules or added new dimensions to the phase-out schedule. These amendments include:

- In 1990, the London Amendment
- In 1992, the Copenhagen Amendment
- In 1997, the Montreal Amendment; and
- In 1999, the Beijing Amendment.

United Nations Framework Convention on Climate Change (UNFCCC)

Ratified by South Africa in 1997. The convention addresses the threat of global climate change by urging governments to reduce the sources of greenhouse gases. The ultimate objective of the convention is to stabilise greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous interference with the climate system of the world.

In terms of this Convention, South Africa is required to:

- Develop, update and publish national inventories of anthropogenic emissions by sources and removals by sinks of greenhouse gases - the greenhouse gases exclude those listed in the Montreal Protocol
- Formulate, implement and update national and regional programmes containing measures to mitigate climate change
- Promote and co-operate in the development and transfer of technology that controls, reduces or prevents anthropogenic emissions of greenhouse gases

- Promote sustainable management, conservation and enhancement of sinks and reservoirs of greenhouse gases
- Co-operate in preparing for the adaptation to the impacts of climate change
- Take climate change considerations into account where feasible, in relevant social, economic and environmental policies and actions with a view to minimising adverse effects on the economy, public health and the quality of the environment
- Promote and co-operate in research
- Promote and co-operate in the timeous and transparent exchange of information, including scientific, technological, socio-economic and legal information
- Promote and co-operate in education, training and public awareness and to encourage the widest participation in this process; and report to the Conference of the Parties.

Environmental Authorisations

DEAT authorises permits for the chemicals that may be brought into the country through the Department of Trade and Industry. The import of chlorofluorocarbons (CFCs) into South Africa is banned.

3.1.2.2.3 Description of Extent of Compliance

LEGISLATIVE PROVISIONS	EXTENT OF COMPLIANCE
<i>Convention for the Protection of the Ozone Layer (Vienna Convention)</i>	
	<ul style="list-style-type: none"> ▪ All the ODS's consumed/used in this country are 100% imported. The Department of Customs and Excise uses customs controls at points of entry to prevent the illegal import or export of these substances.
<i>Montreal Protocol on Substances that Deplete the Ozone Layer</i>	
	<ul style="list-style-type: none"> ▪ South Africa is the only developing country years ahead of the Montreal Protocol schedule in eliminating ozone-depleting substances such as chlorofluorocarbons (CFC's) and halons. However, South Africa is ranked 20th in the world as far as greenhouse production is concerned, mainly because we are so dependent on coal for energy. ▪ Monitoring the import of ODS's is based on reporting by all importers and customs statistics. No changes have been made to customs procedures or customs codes and Mandatory reporting of consumption should be introduced. There is currently more than 80% compliance with DTI legislative provisions. This figure is based on the rate of cases that are being reported to the Department in terms of illegal dealings in these substances ▪ <i>Controls on ODS in bulk (other than methyl bromide):</i> DEAT, in consultation with DTI and Customs and Excise may impose quotas, especially in the phase-out stages where the tonnage of these substances gradually diminishes to zero consumption. It is important to do this to protect those traders who have been active in this field in a market that is already diminishing. New comers to the market are not allowed to deal in these substances nor are they furnished with import permits. ▪ <i>ODS imports from and export to Non-Party countries:</i> There are no regulations banning ODS imports from and exports to Non-Party countries. However, the DEAT controls such trading transactions in accordance with the requirements of the Montreal Protocol. ▪ <i>Controls on import and sale of products containing, made with or designed for ODS:</i> The import of such products is controlled through DTI's Import and Export Control Regulations and, as mentioned above, the compliance rate is over 80%. ▪ <i>Controls on the "End Use" of ODS's (other than methyl bromide):</i> South Africa has not prohibited the use of ODS for any specified applications. South African industries are co-operative in terms of the requirements of the Protocol and they use the modern technologies that are becoming

LEGISLATIVE PROVISIONS	EXTENT OF COMPLIANCE
	<p>more and more ozone-friendly.</p> <ul style="list-style-type: none"> ▪ <i>Controls on service and installation of refrigeration and air-conditioning equipment:</i> South Africa has no regulations concerning service and installation of refrigeration and air-conditioning equipment with ODS refrigerants. The South African Bureau of Standards (SABS) has developed Codes of Practice of relevance for the reduction of ODS refrigerant emissions (SABS 0147/1994). ▪ <i>Control of methyl bromide:</i> There are only 3 officially recognised importers of methyl bromide. ▪ <i>Voluntary Agreements:</i> DEAT has not entered into any official voluntary agreements with the industry on actions to phase out ODS. CFC's, 1,1,1-trichloroethane, halons and carbon tetrachloride have been phased out using self-regulating agreements without any punitive actions and dates because industry is aware of the ozone depletion issue and for them to do business internationally, they have to act in an environmentally responsible manner. The only control measure that is applied, if needs be, is the imposition of an environmental levy to act as a disincentive ▪ <i>Economic incentives and disincentives:</i> As a disincentive for the use of regulated ODS's they can only be imported after an environmental levy of R5,00 per kg of CFC is paid on the import and production of all CFC's, carbon tetrachloride and 1,1,1-trichloroethane. This is done on the recommendation of DEAT in collaboration with DTI and Customs and Excise. This levy was implemented during 1994 and 1995 and there was a drastic drop in the usage of these substances because they became very expensive for people to use. ▪ <i>Labelling requirements:</i> South Africa has no regulations requiring the labelling of products or equipment which contains, are made with, or use ODS. There are also no regulations, guidelines or recommendations aimed at encouraging labelling of products or equipment which does not contain ODS, or are made without the use of ODS. There are also no requirements for the mandatory verification of products which are labelled as not containing or made without ODS. However, special controls on pesticides require labelling of methyl bromide in terms of the Fertilisers Act. ▪ <i>Criteria for selection of alternatives:</i> South Africa has not established governmental guidelines for the selection of acceptable alternatives to ODS.

3.1.2.2.4 Constraints and Limitations with Respect to Ensuring Compliance

CONSTRAINTS AND LIMITATIONS	ACTIONS TO ADDRESS THESE
There is no centralised digital database for gaseous emissions and air quality in South Africa. The database maintained by DEAT is incomplete and not accessible to the public. There is a need for all emissions data required in terms of air pollution legislation to be held in a single database accessible to researchers and policymakers	<ul style="list-style-type: none"> ▪ Centralised digital database to be investigated
There is no legislation that compels importers/exporters to furnish consumption data if required to do so especially to report to the Ozone Secretariat (as part of the obligations of Parties to the Protocol)	<ul style="list-style-type: none"> ▪ Legislative options to be investigated
There is no legislation that empowers the government to confiscate equipment that rely or depend on ODS usage once it is inside the borders of the country. This is important for the protection of those companies that	<ul style="list-style-type: none"> ▪ Legislative options to be investigated

CONSTRAINTS AND LIMITATIONS	ACTIONS TO ADDRESS THESE
are compliant with the requirements of the Protocol because they have moved to ozone-friendly technologies, as they are made available globally. This, in effect, will also discourage people who are still smuggling these controlled substances into the country	

3.1.2.2.5 Programmes for Implementation/Ensuring Compliance

PRIORITY PROGRAMMES 2000 - 2004	OUTPUTS	TIMEFRAME
Implement the schedule to phase-out Substances that Deplete the Ozone Layer	<p>1 January 2001: Methyl bromide consumption restricted to 75% of 1991 usage</p> <p>1 January 2004: HCFC consumption restricted to 65% of 1996 usage</p> <p>1 January 2005: Methyl bromide consumption restricted to 50% of 1991 usage</p>	2001 - 2004

3.1.2.2.6 Arrangements for Co-operation

The National Committee on Climate Change is the primary vehicle through which the work pertaining to the United Nations Framework Convention on Climate Change is undertaken. Membership is made up from representatives from central government (Environmental Affairs and Tourism; Minerals and Energy; Foreign Affairs; Trade and Industry; Water Affairs and Forestry; Housing; Transport; Arts, Science, Culture and Technology); representatives from business, industry, labour, NGOs and CBOS. Provincial participation in this committee is minimal because of a lack of funds and resources to attend meetings which take place 4 times a year.

GOVERNANCE PARTNERS	NATURE OF CO-OPERATION	ARRANGEMENTS
Agricultural Research Council	Methyl Bromide alternatives	▪ Regularly
Customs and Excise	Collection of ODS data and control of these substances into the country	▪ Half-yearly
Department of Agriculture	Agricultural fumigants for example methyl bromide	▪ As above, or whenever there is a need
Department of Foreign Affairs	Diplomacy when dealing with international issues or when attending international meetings	▪ Quarterly meetings at most
Department of Health	Health-related issues for example metered-dose inhalers for asthma sufferers	▪ As above
Department of Trade and Industry	Import and export permits of ODS CFC task force addresses issues relating to the importation of ODS	▪ Regularly
Industry	All sectors on relevant issues: refrigeration and air conditioning; methyl bromide; aerosols; solvents; mining; halons; and foam blowing	▪ Working groups have been established for each of the different sectors. These working groups meet on an ad hoc basis as new developments emerge. The meetings are convened by

GOVERNANCE PARTNERS	NATURE OF CO-OPERATION	ARRANGEMENTS
		DEAT
Labour	Labour-related issues on the Montreal Protocol	▪ As above
Non-Governmental Organisations	Montreal Protocol related issues	▪ As time demands it
Public	Raising public awareness on ODS-related issues and transparency	▪ As above
South African Pulmonary Society	Asthma and chronic obstructive pulmonary diseases	▪ Once or twice a year
Wits University	Refrigeration and air-conditioning research	▪ Twice a year

3.1.2.3 HAZARDOUS SUBSTANCE MANAGEMENT AND POLLUTANT INFORMATION

3.1.2.3.1 Description of Environmental Management Functions

- Reduce the polluting and negative impact of hazardous waste and materials on the environment, health and safety
- Promote the environmentally sound and safe management of such materials in a sustainable manner through effective co-ordination, both nationally and internationally.
- Collect, co-ordinate, and manage data of pollutants released into the environment

3.1.2.3.2 Description of Specific Environmental Laws, Norms or Standards Applied by this Function

Environmental Conservation Act 73 of 1989: Section 20 deals with waste management, including the establishment and operation of waste disposal sites. Such sites may only be operated under a permit issued by the Minister of Water Affairs.

Section 21 provides for the identification of waste and sewerage disposal and chemical treatment activities by DEAT, specifically those activities that may have a substantial detrimental effect on the environment.

In terms of Section 24 of this Act, the Minister of Environmental Affairs and Tourism has prescribed regulations on waste management (Government Notice R1196, 8 July 1994), requiring a permit for the establishment and operation of a waste disposal. The Department of Water Affairs and Forestry has published Minimum Requirement Guidelines, which can be included as permit conditions.

Section 26 (b, c, and j) provides for regulations for collection of information on generation and disposal of waste.

Atmospheric Pollution Prevention Act 45 of 1965: Section 44 makes provision for the prevention and control of air pollution from chemical processes and non-hazardous and hazardous waste incineration plants and waste sites. It also controls dust from landfill activities.

South Africa ratified the Convention on the Control of Trans-boundary Movements of Hazardous Wastes and their Disposals (Basel Convention) in 1994. The objectives of this Convention are to reduce production of hazardous waste and to restrict transboundary movement and disposal of such waste. The Convention aims to ensure that any transboundary movement and disposal of hazardous waste takes place in an environmentally sound and responsible way. South Africa's obligations are:

- Environmentally sound management of hazardous waste
- Establishment of a notification system (authorisation of permits for import, export and transit)
- Reporting on amount of waste generated annually, including cleaner production and waste minimisation tendencies.
- Development of technical guidelines for a variety of hazardous waste
- Research on treatment options for hazardous waste

Specific legislation is required to implement the requirements of the Basel Convention. Another obligation associated with this Convention is the establishment of a Regional Training Centre for English speaking African countries as a follow up from a Decision of the Conference of the Parties.

Persistent Organic Pollutants (POPs): South Africa is currently negotiating the text and aims to sign the Convention by March 2001. The Convention aims to take international action to minimise risks associated with POP chemicals already identified and proven to pose a threat to the environment and human health through their toxicity and persistence. Various dangerous and highly toxic chemicals will be reduced and phased out in co-operation with the international community. Special efforts have been made so far to co-ordinate and collaborate with SADC countries.

In terms of this Convention, South Africa will be obliged to:

- Develop source inventories for Dioxins, Furans, and PCB(Polychlorinated Biphenyls)
- Promote cleaner production in industry to reduce emissions of POPs
- Improve waste management techniques
- Initiate a country feasibility study to assess the capacity to analyse these chemicals
- Create enabling legislation to monitor and enforce provisions of the Convention
- Promote new management techniques such as: Integrated Pesticide Management; Integrated Vector Management; and Cleaner Production
- Information Management and Strategic Networking
- Awareness raising about the danger of these chemicals
- Seek cost effective alternatives to POPs (especially pesticides)
- Phase out use of PCBs by 2010
- Manage existing stocks of obsolete pesticides including disposal and treatment.

Environmental Authorisations

DEAT issues permits for the trans-boundary import and export of hazardous waste as stipulated in the Basel Convention.

3.1.2.3.3 *Description of Extent of Compliance*

While information is currently largely not available to determine the extent of compliance, on the basis of Section 40 of NEMA, DEAT has initiated the appointment of a unit (the Rapid Reaction Environmental Enforcement Unit) that will ensure the implementation of Chapter 7 of NEMA on compliance, enforcement and protection.

POLICY AND LEGISLATIVE PROVISIONS	EXTENT OF COMPLIANCE
<i>National Environmental Management Act 107 of 1998 (NEMA):</i>	
Duty of Care principles	<ul style="list-style-type: none"> ▪ There are currently no systems in place to monitor compliance. This gap will be addressed through the e Rapid Reaction Environmental Enforcement Unit
<i>Environmental Conservation Act 73 of 1989</i>	
Section 20 Section 21 Section 26	<ul style="list-style-type: none"> ▪ There are currently no systems in place to monitor compliance. This gap will be addressed through the e Rapid Reaction Environmental Enforcement Unit
<i>Atmospheric Pollution Prevention Act 45 of 1965:</i>	
Section 44	<ul style="list-style-type: none"> ▪ There are currently no systems in place to monitor compliance. This gap will be addressed through the Rapid Reaction Environmental Enforcement Unit
<i>Agenda 21: Rio Declaration:</i>	
Chapter 19 (Persistent Organic Pollutants)	<ul style="list-style-type: none"> ▪ There are currently no regulations to enforce compliance with provisions. Provisions of this convention will only be in force once South Africa has ratified the convention, possibly in 2002.
Chapter 20 (Basel Convention)	<ul style="list-style-type: none"> ▪ Exporting companies have to apply in writing to DEAT for permits. The exporting company has to comply with requirements specified in the Basel

POLICY AND LEGISLATIVE PROVISIONS	EXTENT OF COMPLIANCE
	Convention. When all requirements have been met, DEAT issues a permit ranging from 3 months – 12 months. Customs officials are required to check shipments meet stipulated requirements at the port/border of entry/exit. The capacity of customs officials in interpreting the permit requirements is a key determining factor in ensuring compliance. There is a need for an inter-provincial permitting system for the transportation of hazardous substances across provincial boundaries. Local authorities need to be informed timeously about consignments and have their own Awareness Preparedness for Emergencies at Local Level (APPEL) programmes in place.

3.1.2.3.4 Constraints and Limitations with Respect to Ensuring Compliance

CONSTRAINTS AND LIMITATIONS	ACTIONS TO ADDRESS THESE
Legislation is the major gap	<ul style="list-style-type: none"> ▪ National Profile planned in order to determine legislative requirements for chemicals management ▪ Regulations for the transportation of waste and hazardous substances (including chemicals and radio-active materials) are needed. All carriers of these substances must be labelled and drivers must under-go specialised training.
Inter-departmental/inter-sectoral co-ordination is needed	<ul style="list-style-type: none"> ▪ The establishment of the Committee for Environmentally Sound Management of Hazardous Materials (ESMHM) – a multi-stakeholder forum and the formalisation of inter-departmental co-ordinating committees is underway ▪ Need to formalise the relationship between Departments of Transport, Labour and DEAT on the transportation of dangerous chemicals such as benzene. Currently, these departments meet on an ad hoc crisis basis. ▪ Need to introduce a link between the Integrated Waste Management System and hazardous waste management. ▪ Every industrial company must develop Emergency Response Plans. DEAT needs to consult with industry on these plans and monitor their implementation together with the Department of Labour. A data-base of all companies that are credible emergency response companies (with built-in quality assurances) needs to be compiled and this information made available to provinces and local authorities. When there is a disaster, the polluting company should be required to pay (polluter pays principle). ▪ DEAT will manage the Pollutants Release Transfer Register whereby industry or all generators will have to report on their pollutant releases. DEAT will establish a unit that will monitor and enforce compliance on this. ▪ DEAT will develop a national profile on the environmentally sound management of chemicals in liaison with affected Departments.

3.1.2.3.5 Programmes for Implementation/Ensuring Compliance

PRIORITY PROGRAMMES 2000 - 2004	OUTPUTS	TIMEFRAME
Implement the Basel Convention	National Profile on Chemicals Management developed and implemented	2002
	Regulations for the storage, transport and disposal of hazardous substances	2002
	National Policy on the Environmentally Safe Management of Dangerous Materials developed	2002
	Basel Regional Training Centre established	2003
	Thor Programme of Action developed and implemented	2003
Implement Prior Informed Consent (PIC) provisions	PIC classification and registration system developed	2001
	Inventories of PIC chemicals developed	2002
	Management manual for PIC import and export procedures developed and implemented	2004
	Regulations on PIC's promulgated	2004
Implement Persistent Organic Pollutants provisions	Situation analysis of POP's in South Africa undertaken	2001
	Inventories of source of POPs developed	2001
	Management plan for phasing out and identifying further POP's developed and implemented	2002
	Regulations on POP's promulgated	2004

3.1.2.3.6 Arrangements for Co-operation

DEAT intends establishing a Standing Committee on Environmentally Sound Management of Hazardous Materials (ESMHM) by the end of 2001. This Committee should consist of the departments listed in the table below with DEAT as lead department. This committee should be a subcommittee established under NEMA and should also consist of other stakeholders from industry, NGO, Labour and CBOs.

GOVERNANCE PARTNERS	NATURE OF CO-OPERATION	ARRANGEMENTS
Department of Foreign Affairs	International multilateral agreements	<ul style="list-style-type: none"> Weekly meetings
Department of Health	Implementation of Hazardous Substances Act Poison group monitoring/ Hazardous waste management (medical waste). Chemicals management. Intergovernmental Programme on Chemical Safety (IPCS)	<ul style="list-style-type: none"> Monthly meetings as needed – there is currently no formal way of linking with health authorities. DOH chairs the Poison Working Group. DEAT does not participate in these meetings. DOH should provide DEAT with information on any chemical which is poisonous to the environment and dangerous to human health. DEAT should be part of the permit process administered by DOH.
Department of Labour	Chemicals (Classification and labelling) Implementation of chapter 19 of Agenda 21. Most important stakeholder on health and safety.	<ul style="list-style-type: none"> Monthly meetings as needed

GOVERNANCE PARTNERS	NATURE OF CO-OPERATION	ARRANGEMENTS
Department of Mineral Affairs and Energy	Release of dangerous chemicals from mines including asbestos and chrome. Transportation and disposal of radioactive materials	<ul style="list-style-type: none"> DEAT participates in a DME committee on the rehabilitation of asbestos mines. There is a need for DME to report to DEAT on the chemicals they release as all of these substances have an effect on the environment DEAT needs to be informed and be part of the issuing of permits for the transportation and disposal of radioactive materials. There should be regulations on both transporting and waste management. DME should develop regulations and report compliance to DEAT.
Department of Provincial Affairs and Local Government	Disaster management (Section 30 of NEMA) Implementation of Awareness Preparedness for Emergencies at Local Level (APELL) system for anthropogenic disasters	<ul style="list-style-type: none"> Local government has in the past tended to focus only on the management of natural disasters. They have never participated in the management of anthropogenic disasters. Co-operative governance links still need to be build between local government and DEAT
Department of Public Works (DPW)	Infrastructure development: <ul style="list-style-type: none"> Asbestos Chrome Vanadium Steel 	<ul style="list-style-type: none"> Co-operative governance linkages still need to be built.
Department of Trade and Industry (DTI)	Import and Export regulations for the following Conventions <ul style="list-style-type: none"> Basel Convention Rotterdam Convention Stockholm Convention Usage of SIC codes (Standard International Codes) 	<ul style="list-style-type: none"> Stakeholder forum on Hazardous Materials Management.
Department of Transport (DoT)	Transport of dangerous goods SABS 0228	<ul style="list-style-type: none"> Coordination through correspondence
Department of Water Affairs and Forestry (DWAF)	Hazardous waste disposal Landfill management. Manifest system. Medical and infectious waste.	<ul style="list-style-type: none"> Regular meetings
National Department of Agriculture (NDA)	POPs implementation PIC implementation Registration of pesticides Selection of pesticides stock Transportation of pesticides	<ul style="list-style-type: none"> Regular meetings The DOA is the chair of INDAC. This structure concentrates on registering of pesticides and chemicals. DOA should supply DEAT with any new list of chemicals or pesticides that are introduced. DEAT needs to participate in decision-making around setting conditions and issuing permits for companies,

GOVERNANCE PARTNERS	NATURE OF CO-OPERATION	ARRANGEMENTS
		particularly if the chemical to be used has environmental impacts. The precautionary principle should be used as one of the criteria.

3.1.3 ENVIRONMENTAL IMPACT MANAGEMENT (EIM)

3.1.3.1 Description of Environmental Management Functions

- Provide and enforce legislation and regulations dealing with Environmental Impact Assessments (EIAs)
- Develop environmental management decision support tools
- Develop and promote self and co-regulatory approaches
- Provide guidance on the design and use of environmental management co-operation agreements

3.1.3.2 Description of Specific Environmental Laws, Norms or Standards Applied by this Function

National Environmental Management Act 107 of 1998 (NEMA): Chapter 5 of NEMA, Integrated Environmental Management, deals with the topic of environmental assessment and integrated environmental management. The main object of this chapter is to integrate principles of environmental management, set out in Section 2 of the Act, into the planning and development process and to identify, predict and evaluate the effects which policies, programmes, proposals or projects may have on the environment.

Section 24 (1) of the Act requires the consideration, investigation and assessment of the potential impact on the environment, socio-economic conditions and cultural heritage, of activities that require authorisation by law and that may significantly affect the environment.

Section 24(2) enables the Minister to make regulations on:

- Activities that may not be commenced without prior authorisation from the Minister or MEC
- Geographical areas in which specified activities may not be commenced without prior authorisation
- The procedure to be followed in investigating, assessing and communicating potential impacts.

Section 24 (7) sets out minimum procedures for environmental impact assessments.

Environmental Management Cooperation Agreements (EMCAs)

Chapter 8 of NEMA provides that the Minister and every provincial government and local authority may enter into environmental management cooperation agreements with any person or community for the purpose of promoting compliance with the principles laid down in the Act. Section 45 in this chapter makes provision for the development of regulations for Environmental Management Co-operation Agreements (EMCAs). These regulations may provide standards and procedures for the management of public participation in the negotiation of EMCAs.

Environment Conservation Act 73 of 1989: Part V of the Environment Conservation Act provides for the control of activities that may have a detrimental effect on the environment. Regulations were promulgated under sections 21, 22 and 26, in September 1997 (Government Gazette No's R1182, R1183 and R1184). The regulations list activities that may not be commenced without an environmental impact assessment, prescribe the EIA procedure, and designate the province as the competent authority.

Applications in respect of listed activities are directed to the relevant provincial authority, except in the following instances, where the national Department of Environmental Affairs and Tourism is responsible:

- Where the activity concerned has direct implications for national environmental policy or international commitment or relations

- Where the environment under threat is demarcated as an area of national or international importance
- Where the Minister and the provincial authority jointly decide that an application in respect of a specific activity should be considered by the Minister
- Where a national government department, the relevant provincial authority or a statutory body is the applicant, or
- Where the activity has the potential to affect the environment across the borders of two or more provinces.

3.1.3.3 Description of Extent of Compliance

POLICY AND LEGISLATIVE PROVISIONS	EXTENT OF COMPLIANCE
<i>National Environmental Management Act 107 of 1998 (NEMA)</i>	
Minimum procedures	
Environmental Impact Assessment	<ul style="list-style-type: none"> ▪ In terms of NEMA new EIA regulations are to be promulgated by the end of 2000. See Environment Conservation Act
Environmental Management Co-operation Agreements	<ul style="list-style-type: none"> ▪ No agreements have been signed. ▪ A policy on EMCAs is being developed and should be completed by the end of 2001. ▪ Draft EMCAs have been developed with 3 sectors: SA Oil Refinery Sector; Chemical and Allied Industry Association; and the SA Tyre Recycling Sector. These EMCAs can only be finalised when the necessary environmental standards have been developed. for example, the SA Oil Refinery Sector EMCA needs air quality standards. South Africa currently does not have air quality standards. These will be developed in the course of 2001
<i>Environment Conservation Act</i>	
Applications in respect of listed activities	<ul style="list-style-type: none"> ▪ In order to ensure that the conditions are being complied with, monitoring and follow-up inspections are necessary. This could not yet be done due to lack of capacity ▪ On the whole, there is a relative awareness among developers and consultants of the EIA regulations ▪ There are cases where development goes ahead without the necessary EIA authorisation. Depending on the circumstances, this may be due to lack of awareness of the regulations, or, in certain cases authorities might delay the issue of a record of decision and developers proceed illegally, without authorisation. ▪ While standard conditions and project specific conditions are given for each record of decision issued, there are no mechanisms to monitor application of either recommendations arising from the EIA, or conditions of approval.

3.1.3.4 *Constraints and Limitations with Respect to Ensuring Compliance*

CONSTRAINTS AND LIMITATIONS	ACTIONS TO ADDRESS THESE
The list of activities in the EIA regulations does not provide adequate thresholds.	<ul style="list-style-type: none"> All deficiencies and inadequacies in the implementation of the current EIA regulations will be addressed in the new regulations to be promulgated in terms of NEMA.
Substantial detrimental impact has not been defined in the regulations and therefore this provides a broad scope for assessment and interpretation.	<ul style="list-style-type: none"> Sensitive environments to be delineated, maps and guidelines on limits of acceptable change to be defined.
Lack of uniformity in the implementation and application of the regulations within the various provinces.	<ul style="list-style-type: none"> Minimum norms and standards are to be set in terms of new regulations.
Turn-around times for the processing of EIA applications are too long.	<ul style="list-style-type: none"> Minimum timetables for EIA review will be investigated during development of new regulations.
Monitoring of conditions of approval is lacking.	<ul style="list-style-type: none"> Needs monitoring guidelines and resources (i.e. human and funding).
Mechanisms to identify illegal developments are lacking.	<ul style="list-style-type: none"> Provision for ex post facto approval to be investigated. Penalties and fines to be imposed.
Working relationships between national and provincial authorities need to be strengthened to ensure uniformity in application and implementation of regulations.	<ul style="list-style-type: none"> Promote co-operative governance via the workgroups, HOD/MINTECH and CEC.

3.1.3.5 *Programmes for Implementation/Ensuring Compliance*

PRIORITY PROGRAMMES 2000-2004	OUTPUTS	TIMEFRAME
Produce new regulations on environmental impact assessment	New regulations for EIAs in terms of Section 24 (2) of NEMA, to replace the existing EIA regulations promulgated in 1997 under the Environment Conservation Act, 1989 formulated	2001
	Proper appeal procedure with regard to decisions taken on applications by the relevant authorities created	2001
	Benchmarks for EIA administration and implementation established	2001
	Efficient and effective processing of applications achieved	2004
	Computerised management systems for EIA applications on a national basis (includes the creation of a "one stop shop" for EIA authorisations developed	2004
Produce Regulations Environmental Management Co-operation Agreements (EMCAs)	Discussion document for Environmental Management Co-operation Agreements (EMCAs) published	2000
	EMCAs guideline document published	2001
Evaluate and Authorise EIAs	EIA register on a national level for national projects developed	2001
	National standards for evaluating EIAs developed	2002
	EIAs processed according to set time-frames	2004
	All Environmental Potential Atlases (ENPAT's) compiled and updated	2002

3.1.3.6 Arrangements for Co-operation

The nine provincial environmental authorities assist DEAT with the implementation and administration of the EIA regulations and are the primary co-operative governance partners for this function. The work of this function is conducted primarily through the MINTEC Impact Management Working Group.

PARTNERS	NATURE OF CO-OPERATION	ARRANGEMENTS
Nine provincial environmental authorities	Provinces assist DEAT with the implementation and administration of the EIA regulations	<ul style="list-style-type: none"> HOD/MINTECH committee and its workgroup for EIA, Planning and Pollution & Waste Management

3.2 BIODIVERSITY AND HERITAGE

3.2.1 BIODIVERSITY MANAGEMENT

3.2.1.1 Description of Environmental Management Functions

The Chief Directorate Biodiversity and Heritage seeks to promote sound management of biodiversity for sustainable and equitable use through promoting conservation and development of these resources

In line with the main aim, key functions are to:

- Implement the White Paper on the Conservation and Sustainable Use of South Africa's Biological Diversity
- Establish a national system to manage biodiversity and conservation areas
- Regulate utilisation of biological diversity
- Provide biodiversity information for optimal utilisation
- Implement International Conventions

3.2.1.2 Description of Specific Environmental Laws, Norms or Standards Applied by this Function

Legal framework for biodiversity management: The Department is reforming the legal framework with respect to biodiversity management. Currently existing legislation covering biodiversity is under the administration of other national government departments, the 9 provinces and statutory bodies.

Convention on Biological Diversity (CBD): Ratified by South Africa in 1995. The aim of the CBD is to effect international co-operation in the conservation of biological diversity and to promote the sustainable use of living natural resources worldwide. It also aims to bring about the sharing of benefits arising from the utilisation of natural resources.

Convention on the Conservation of Migratory Species of Wild Animals (Bonn Convention): Acceded to by South Africa in 1991. The Bonn Convention is a response to the need for nations to cooperate in the conservation of animals that migrate across their borders. These include terrestrial animals, reptiles, marine species and birds. Special attention is paid to endangered species. South Africa is a major partner in this convention as it is the terminus for many of the migratory species, both to the Palearctic (birds) and the Antarctic species (whales and birds).

In terms of this Convention, South Africa is required to cooperate with other countries to ensure the effective conservation of these species throughout its range. This includes amongst others adherence to the Concerted Action of the Convention developed for specific species as well as implementing the Actions Plans for species. This is mainly achieved by means of provincial nature conservation ordinances.

Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES): Ratified by South Africa in 1975. The main objectives of CITES are the protection of endangered species prominent in international trade, through appropriate trade control measures and monitoring the status of such species.

In terms of this Convention, South Africa is required to:

- Regulate trade in endangered species
- Keep in touch with conservation of endangered species with interaction between parties worldwide
- Actively participate in decision-making on the up-listing and down-listing of species
- Implement measures to combat the smuggling of species to protect the biodiversity
- Promote sustainable utilisation of species by trading and hunting.

Convention on Wetlands (Ramsar Convention): Ratified by South Africa in 1975. The Convention aims to stem the loss and promote the wise use of all wetlands. The convention addresses one of the most important issues in South Africa, namely the conservation of the country's water supplies, for both the use of natural and human environments.

3.2.1.3 Description of Extent of Compliance

A legal framework to give effect to policy on the management of biological diversity is not yet in place. In addition there is no mechanism in place to monitor compliance with the conventions.

POLICY AND LEGISLATIVE PROVISIONS	EXTENT OF COMPLIANCE
<i>Convention on the Conservation of Migratory Species of Wild Animals (Bonn Convention)</i>	
Co-operate with other countries to ensure conservation of species	<ul style="list-style-type: none"> ▪ A trilateral agreement is currently being negotiated between Namibia, Botswana and South Africa for the conservation of sandgrouse. This agreement will ensure the survival of the species and enhance co-operative regional efforts ▪ South Africa has set in motion procedures for ratification of the African-Eurasian Migratory Waterbird Agreement. As a very important range state of migratory waterbird, South Africa can make a contribution to the global conservation efforts of these birds and their habitats (wetlands). ▪ In the process of developing a national policy for the Conservation of Migratory Birds.
<i>Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES)</i>	
Regulate trade in endangered species. Keep in touch with conservation of endangered species with interaction between parties worldwide. Actively participate in decision-making on the up listing and down listing of species. Implement measures to combat the smuggling of species to protect the biodiversity. Promote sustainable utilisation of species by trading and hunting.	<ul style="list-style-type: none"> ▪ South Africa has been a Party to CITES since 1975 and has been implementing the Convention through provincial legislation with a great deal of success ▪ This can be measured by means of the number of incidences where infractions had been reported to the Conference of the Parties (COPs). For the last two COPs South Africa had not been mentioned at all in the Infractions Report by the Secretariat. ▪ The implementation of the Convention by means of the provincial legislation has led to a certain degree of uncoordinated and fragmented implementation. This is being addressed through the development of a national CITES implementation plan which will enhance South Africa's compliance with the Convention.
<i>Convention on Wetlands</i>	
Stem the loss and promote the wise use of all wetlands	<ul style="list-style-type: none"> ▪ South Africa has designated 15 sites to the List of Wetlands of International Importance. A number of others are under consideration. ▪ A Wetland Conservation Bill has been proposed which will help South Africa meet the aims of the convention.

3.2.1.4 *Constraints and Limitations with Respect to Ensuring Compliance*

CONSTRAINTS AND LIMITATIONS	ACTIONS TO ADDRESS THESE
A programme for implementation of the White Paper on the Conservation and Sustainable Use of South Africa's Biological Diversity is needed.	▪ Process underway for preparing Biodiversity Strategy and Action Plan
A national legal framework setting norms and standards for biodiversity management is not yet in place.	▪ Process underway as part of the broader environmental law reform programme

3.2.1.5 *Programmes for Implementation/Ensuring Compliance*

PRIORITY PROGRAMMES 2000 - 2004	OUTPUTS	TIMEFRAME
<i>Legislation:</i> Establish a national legal framework that sets in place principles, institutions, and procedures for biodiversity management.	Act promulgated.	2001
	Programme for implementation defined and initiated	2002
<i>Biodiversity strategy and action plan:</i> Put in place medium range strategies for biodiversity management and actions for implementation	Biodiversity Strategy and Action Plan completed.	2001
	Programme for implementation defined and initiated	2002
<i>Conservation Strategy:</i> Develop a spatial strategy that will inform the consolidation and expansion of South Africa's protected areas as well as conservation outside of protected areas, resourcing and financing of conservation initiatives in South Africa.	Conservation strategy completed	2001
	Programme for implementation defined and initiated	2002
	Expansion, consolidation and development of the following: Addo National Park Cape Peninsula National Park Pondoland (Wildcoast) Protected Area	2003
<i>Information Management:</i> Establish a coherent information system that will improve accuracy and expand the scope of biodiversity information in South Africa	Clearing house mechanism in place	2001
Establish a uniform CITES implementation system	Uniform administration system developed	2001
	Regulatory framework guiding trade in CITES listed endangered species; enforcement strategy for CITES developed	2002
	Capacity building programmes for CITES implementation developed and implemented	2003
Implement obligations under the RAMSAR Convention on Wetlands	Inventory of wetlands completed	2001

3.2.1.6 *Arrangements for Co-operation*

Much of the work of this section goes through the MINTEC Biodiversity Sub-Committee.

The Orange River Mouth Steering Committee, of which DEAT is the lead department, looks at Ramsar sites. This committee includes the Northern Cape provincial environmental department; representatives from Namibia and the Richtersveld communities.

GOVERNANCE PARTNERS	NATURE OF CO-OPERATION	ARRANGEMENTS
------------------------	------------------------	--------------

GOVERNANCE PARTNERS	NATURE OF CO-OPERATION	ARRANGEMENTS
National Departments including DTI, DACST and provincial environmental departments	Development of legislation Biodiversity strategy and action plan	<ul style="list-style-type: none"> ▪ Bi-lateral meetings
Provincial environmental departments	Conservation Strategy	<ul style="list-style-type: none"> ▪ MINTEC Working Group on Biodiversity
Endangered Wildlife Trust	National Committee on Cheetah Conservation	<ul style="list-style-type: none"> ▪ DEAT participates in activities
IUCN	IUCN is the lead agent in the Roan Action Group.	<ul style="list-style-type: none"> ▪ DEAT and provincial Environment departments participate in the activities together with private game reserves and the Kruger National Park
Department of Water Affairs and Forestry	River Health Programme focusing on aquatic bio-monitoring Working For Water Programme – Wetlands rehabilitation	<ul style="list-style-type: none"> ▪ DEAT participates at project level together with the Water Research Commission and provincial role players ▪ DEAT provides technical advice and assessment of project proposals
Water Research Commission	Steering Committees for Research Projects. Research is undertaken on all aspects of water, mostly aquatic eco-systems.	<ul style="list-style-type: none"> ▪ DEAT participates in approval of project proposals and research undertaken together with DWAF, DOA and provincial departments
Western Cape Nature Conservation Board	Cape Action Plan for the Environment	<ul style="list-style-type: none"> ▪ DEAT participates in a Committee chaired by Western Cape Nature Conservation, together with DWAF, DOA, provincial environmental Department and NGOs.
Department of Land Affairs	Committee on Land Claims and Protected Areas (DLA lead department). In process of drafting a policy document on this.	<ul style="list-style-type: none"> ▪ DEAT participates in the committee together with SANP and Department of Public Works.
National Department of Agriculture	Peat Working Group	<ul style="list-style-type: none"> ▪ DEAT participates in this working group providing advice to DOA on how to manage peat exploitation. The working group includes DWAF and DME

3.2.2 CULTURAL AND NATURAL RESOURCE MANAGEMENT

3.2.2.1 Description of Environmental Management Functions

- Implement the Convention to Combat Desertification (CCD)
- Establish Transfrontier Conservation Areas (TFCA)
- Implement the World Heritage Convention
- Integrate cultural and natural resources management into environmental management processes.

3.2.2.2 *Description of Specific Environmental Laws, Norms or Standards Applied by this Function*

World Heritage Convention Act, 1999: The intention of this Act is to secure the development and conservation of South Africa's world heritage sites. The objectives of this Act includes:

- Providing for the incorporation of the World Heritage Convention into South African Law
- Enforcing and implementing the World Heritage Convention in South Africa
- Recognising and establishing World Heritage Sites
- Establishing Authorities and granting additional powers to existing organs of state especially those safeguarding the integration of World Heritage Sites
- Where appropriate, establishing Boards and Executive Staff Components for these Authorities,
- Developing and implementing integrated Management plans for World Heritage Sites
- Addressing land matters in relation to World Heritage Sites
- Executing financial, auditing and reporting controls over the Authorities.

United Nations Convention to Combat Desertification (CCD)

South Africa signed in January 1995. The Convention aims to combat desertification and mitigate the effects of drought, particularly in Africa, through:

- The conservation of biological diversity
- Sustainable use of biological resources
- Fair and equitable sharing of benefits arising from the use of genetic resources
- Increasing food security
- Creating new opportunities for alternative livelihoods
- Improving living conditions
- Reducing poverty
- Alleviating the effects of climate change

As party to the Convention, South Africa is obliged to:

- Ensure that the agreement is implemented in accordance with its objectives
- Develop national strategies, plans or programmes, or adapt existing ones, to address the provisions of the Convention
- Integrate the conservation and sustainable use of biodiversity into sectoral and cross-sectoral plans, programmes and policies.

The Convention calls for the promotion of women in decision-making activities because of the special role women play in managing natural resources.

World Heritage Convention: Ratified by South Africa in 1997. The convention aims to promote co-operation amongst nations to protect natural and cultural heritage which is of such outstanding value that its conservation is of concern to all people. The World Heritage Convention Act implements the provisions of this Convention.

3.2.2.3 *Description of Extent of Compliance*

POLICY AND LEGISLATIVE PROVISIONS	EXTENT OF COMPLIANCE
<u>World Heritage Convention Act, 1999</u>	
Provide for the incorporation of the World Heritage Convention into South African Law	<ul style="list-style-type: none"> ▪ On 3 December 1999, South Africa was granted its first World Heritage Sites, namely Robben Island, the Fossil Hominid Sites of Sterkfontein and the Greater St Lucia Wetland Park. Two more sites Ukhahlamba/Drakensburg Park and the Cape Peninsula Floristic Region are being considered. ▪ DEAT has made a tentative list of a further 18 potential World Heritage Sites for development ▪ The management of these Sites is governed by the Act ▪ One of the conditions of having a World Heritage Site is that the Sites must be of outstanding universal value. In order to ensure this, Sites Integrated Management Plans
Enforce and implementing the World Heritage Convention in South Africa	
Recognise and establishing World Heritage Sites	
Establish Authorities and granting additional powers to existing organs	

POLICY AND LEGISLATIVE PROVISIONS	EXTENT OF COMPLIANCE
<p>of state</p> <p>Where appropriate, establish Boards and Executive Staff Components for these Authorities</p> <p>Develop and implement integrated Management plans for World Heritage Sites</p> <p>Address land matters in relation to World Heritage Sites</p> <p>Execute financial, auditing and reporting controls over the Authorities.</p>	<p>and Management Authorities should be in place.</p> <ul style="list-style-type: none"> Monitoring takes place through submission of State of Conservation Report by Site managers to the World Heritage Committee
<i>United Nations Convention to Combat Desertification (CCD)</i>	
The CCD prescribes that every Party member should draw up a National Action Programme to incorporate long terms strategies and to promote policies and strengthen institutional frameworks which develop co-operation and co-ordination.	<ul style="list-style-type: none"> According to the United Nations, 90% of South Africa falls within a desertification risk area, and a national audit assessment shows that 25% of this land is already degraded. At present South Africa lacks a programme or plan to synchronise all the work related to desertification.
<i>World Heritage Convention</i>	
Implement Convention	<ul style="list-style-type: none"> The government passed legislation - the World Heritage Convention Act (1999) to make the Convention part of South Africa

3.2.2.4 Constraints and Limitations with Respect to Ensuring Compliance

CONSTRAINTS AND LIMITATIONS	ACTIONS TO ADDRESS THESE
Provinces are responsible for implementing the Convention to Combat Desertification (CCD), however a close relationship does not exist between the national department and the provinces which creates difficulties when trying to implement	<ul style="list-style-type: none"> National DEAT to play a more prominent role in future in implementing the CCD and liase with provincial counterparts
The CCD had major difficulties in the past. For a year all activities have been halted as a result of a redirection of priorities at a political level. The location of the CCD within the DEAT was also disputed.	<ul style="list-style-type: none"> A decision remains to be taken by the Portfolio Committee and Top Management

3.2.2.5 Programmes for Implementation/Ensuring Compliance

PRIORITY PROGRAMMES 2000 - 2004	OUTPUTS	TIMEFRAME
Community-based natural resource management: Promote natural and cultural resource management at local level	Implementation guidelines for Community Based Natural Resource Management (CBNRM) and Cultural Resources Management developed	2001
	Community-based resource management projects established in Wild Coast and Lubombo SDI's	2001
	Local level communication and awareness networks established	2002

PRIORITY PROGRAMMES 2000 - 2004	OUTPUTS	TIMEFRAME
<i>Transfrontier Conservation Areas</i> : Promote conservation across national boundaries, and especially of common ecosystems.	The following TFCAs launched: <ul style="list-style-type: none"> ▪ Gaza-Kruger- Gonarazhou ▪ Maloti – Drakensberg ▪ Lubombo ▪ Richtersveld - Ai-Ais ▪ Limpopo – Shashe 	2002
Implement the World Heritage Convention Act	World Heritage Convention Implementation and Nomination Guidelines developed	2001
	Sites managed in accordance with guidelines	On-going
	Tentative list of Sites compiled	2001
	Sites nominated for inscriptions	On-going
Implement the Convention to Combat Desertification	National Action Programme for the Implementation of the CCD implemented	2001- 2004
	National Audit on Land Degradation published	2002

3.2.2.6 Arrangements for Co-operation

Convention to Combat Desertification Steering Committee. The Committee meets four times a year and attends to all matters falling under the Convention to Combat Desertification. The following national Departments participate: Environmental Affairs and Tourism, Foreign Affairs, Agriculture, Land, Water and Forestry. The Environmental Monitoring Group also participates.

South African World Heritage Convention Committee. This Committee identifies potential World Heritage Sites; participates in the SA World Heritage Convention Committee; and implements the World Heritage Convention Act and Regulations. Relevant provincial and national departments participate as well as NGOs and CBOs.

The Trans-Frontier Conservation Areas Inter-Departmental Technical Committee is in the process of being formed by DEAT. The Committee will initially focus on the development of the Gaza/Kruger/Gonarezhou TFCA and will consist of the following members: national Departments of Forestry, Land, Safety and Security; the provincial environmental departments of Mpumalanga, Northern Province; and Kwa-Zulu Natal; and the Peace Parks NGO.

GOVERNANCE PARTNERS	NATURE OF CO-OPERATION	ARRANGEMENTS
NGO's and CBO's	Identification of potential World Heritage Convention sites Preparation of nomination files and management plans	▪ Regular meetings
Relevant national and provincial departments	Identification of potential World Heritage Sites Participation in the SA World Heritage Convention Committee Implementation of the World Heritage Convention Act and Regulations	▪ Regular meetings

3.3 MARINE AND COASTAL MANAGEMENT

Marine and Coastal Management functions that involve the management of the environment are to:

- Implement the White Papers on: Sustainable Coastal Development; Marine Fisheries Policy; and Conservation of Biodiversity
- Promote sound use of non-consumptive resources
- Control and reduce marine pollution

3.3.1 MANAGEMENT OF NON-CONSUMPTIVE USE OF MARINE RESOURCES

3.3.1.1 *Description of Environmental Management Functions*

Marine and Coastal Management is responsible for ensuring adequate *in situ* conservation of marine biodiversity through the establishment and effective management of Marine Protected Areas (MPAs). A marine protected area is defined as any area of inter-tidal or sub-tidal terrain, together with its overlying waters and associated fauna, flora, historical and cultural features, which has been reserved by legislation to protect part or all of the enclosed environment.

In almost every case, provincial conservancies manage marine protected areas or South African National Parks, while Marine and Coastal Management retains legislative responsibility.

In summary, Marine and Coastal Management is responsible for:

- Research and the development of policy with regard to
 - the establishment of marine protected areas
 - consumptive and non-consumptive use of resources within such areas
- Facilitating the establishment of a network of MPA's that ensures representation and protection of South Africa's marine biodiversity, facilitates fishery management and promote tourism objectives
- Ensuring that management plans are prepared, and that marine protected areas are managed accordingly.

3.3.1.2 *Description of Specific Environmental Laws, Norms or Standards Applied by this Function*

Marine Living Resources Act (1998): The Establishment of Marine Protected Areas is authorised by section 43, according to which the Minister may declare a marine protected area:

- For the protection of biodiversity
- For the management of fisheries
- To resolve user-conflicts.

Other sections of the Act are also used to protect the environment from certain or all fishing operations and other activities. These may be authorised by Section 15 (Fisheries management Areas), or Section 77e (Closed Areas). Marine Protected areas are declared in Government Notices in terms of the Marine Living Resources Act (1998). Marine protected areas declared in terms of the Sea Fishery Act (1988) were not repealed by the Marine Living Resources Act (1998). See section 84(4).

Operational policies and standards: The SANCOR (South African National Committee on Oceanic Research) Marine Reserve Task Group, which was convened in 1996, developed a system known as COMPARE (Criteria and Objectives for Marine Protected Area Evaluation). This system is used when evaluating existing reserves and assessing the suitability of areas for reserve status. As yet marine protected areas are not managed according to any operational standards, although it is desirable that they be managed according to management plans. Management plans are required by the provinces, conservancies and South African National Parks; Marine and Coastal management does not prescribe its own format.

Fisheries and Agricultural Organisation (FAO) Conduct of Responsible Fishing: As party to this agreement, South Africa recognises the need to protect exploited species by way of marine protected areas.

Convention on Biological Diversity: Jakarta Mandate: The establishment and management of marine protected areas for the conservation of biological diversity is one of the five thematic areas of the implementation of the Convention on Biological Diversity in the marine environment.

MARPOL: Particularly Sensitive Sea Areas: Such an area can be proclaimed for the control of shipping to prevent, or minimise the risk of, marine pollution. The suitability of declaring Table Bay as a particularly Sensitive Sea Area (in the wake of the recent oil spill disaster) is under consideration.

UNESCO: Biosphere Reserves: Suitable areas can be nominated for Biosphere Reserve status. If successful, a Biosphere Reserve is managed according to a certain set prescripts and monitored by UNESCO. The Kogelberg Biosphere Reserve is the first of its kind in South Africa.

World Heritage Convention: World Heritage Sites - suitable areas can be nominated for Biosphere Reserve status. If successful, a Biosphere Reserve is managed according to a certain set prescripts. The Greater St Lucia Wetland Park is an example of a World Heritage Site.

3.3.1.3 *Description of Extent of Compliance*

POLICIES AND LEGISLATIVE PROVISIONS	EXTENT OF COMPLIANCE
Ensure that all bio-geographic zones are adequately represented in marine protected areas	<ul style="list-style-type: none"> South Africa has four marine bio-geographic provinces. Two of these are adequately protected, namely the warm temperate and northern subtropical zone. The southern subtropical zone and cool temperate west coast are poorly represented. It is envisaged that these omissions will be rectified by the creation of the Pondoland and Namaqualand Parks.
Ensure that all habitats are adequately protected in marine areas	<ul style="list-style-type: none"> Estuaries, sandy beaches and offshore-soft-bottom habitats are not adequately protected. Other habitats are well represented.
Ensure that all exploited stocks are adequately protected in marine areas	<ul style="list-style-type: none"> Demersal fish stocks are not protected in marine protected areas. Almost all other resources are represented, but the protection is seldom adequate.
Marine protected areas shall be managed according to management plans	<ul style="list-style-type: none"> Management plans have been drafted for only three marine protected areas. Plans for at least another ten are outstanding.
Fishing is restricted or prohibited in marine protected areas	<ul style="list-style-type: none"> Compliance in this regard is very poor, particularly with regard to offshore resources.

3.3.1.4 *Constraints and Limitations with Respect to Ensuring Compliance*

CONSTRAINTS AND LIMITATIONS	ACTIONS TO ADDRESS THESE
Control and management of marine protected areas is vested in several government departments.	<ul style="list-style-type: none"> <i>Memoranda of Understanding</i> will be entered into by all parties to clarify responsibilities and align policies.
Staff shortage within DEAT (MCM): One scientific post and half of a technical post is dedicated to the development and management of marine protected areas.	<ul style="list-style-type: none"> A marine protected area programme will be developed within MCM to coordinate the development and management of marine protected areas.
Provincial conservancies lack resources to manage marine protected areas adequately.	<ul style="list-style-type: none"> Funds from the Marine Living Resources Fund will be allocated to provincial conservancies to manage marine protected areas in accordance with accepted management plans.
Lack of experience	<ul style="list-style-type: none"> Training and exchange programmes will expose staff to successful models elsewhere in the world.

3.3.1.5 *Programmes for Implementation/Ensuring Compliance*

Agreements between the various management agencies will ensure that marine protected areas are developed and management efficiently, and that they serve common, national goals. To this end, management plans will be developed and implemented. These plans will follow certain basic prescripts, and will be registered and audited by DEAT. There will be special emphasis on development of non-consumptive resources and funding. Various staff training programmes will be

launched to develop the necessary skills for a wide range of management functions, including drafting management plans, monitoring, research, financing and communication.

PRIORITY PROGRAMMES 2000-2004	OUTPUTS	TIMEFRAME
Enter into MOU with S.A. National Parks, and provincial conservancies with respect to the management and development of marine protected areas.	Clear responsibilities established	2001
	Policy on marine protected areas accepted	2001
	Regular meetings to monitor marine protected area management scheduled	On-going
Development of management plans.	All marine protected area have registered management plans available to the public.	2002
Develop training programmes for marine protected area staff	Conservancy staff from all coastal provinces and S.A. National parks will be sent on shadow programmes to US Marine Sanctuaries as part of a bi-national agreement, and participate in Western Indian Ocean Marine Protected Area training programme	Ongoing
	Scientific exchange programmes with USA and New Zealand/Australia will see mutually beneficial short-term exchanges.	Ongoing

3.3.2 MANAGEMENT OF COASTAL RESOURCES

3.3.2.1 *Description of Environmental Management Functions*

- Draft legislation required for effective coastal management
- Develop coastal management guidelines, information and decision-support systems, to inform and support sound decision-making regarding the sustainable utilisation of strategic coastal resources
- Enable effective information exchange amongst all South Africans regarding coastal management principles to ensure the sustainable use of the coast
- Promote sound coastal management, through maintaining existing re-active advisory and co-ordinating services with various stakeholders
- Enable disadvantaged coastal interest groups to benefit from coastal resources, and facilitate joint responsibility between resource users and relevant authorities in the management of coastal resources.

3.3.2.2 *Description of Specific Environmental Laws, Norms or Standards Applied by this Function*

White Paper for Sustainable Coastal Development in South Africa, 1999: Provides the framework for delivery of coastal management functions. One of its major goals is equitable access to coastal resources with particular attention being given to disadvantaged communities. This function is required to implement the White Paper through developing related programmes to guide future decision-making and set minimum norms and standards. The Plan of Action consists of four key elements, namely:

- Institutional and Legal Development.
- Awareness, Education and Training.
- Information.
- Projects.

General Policy for the Control of Off-Road Vehicles in the Coastal Zone (Notice 858 of 29 April 1994: This policy excludes, in principle, off-road vehicles (ORV's) from the coastal zone, except in specially demarcated areas where vehicles are allowed on a permit system. The policy is currently implemented by all provincial, regional and local authorities who have jurisdiction over coastal land (including amongst others the admiralty reserve and seashore) and applies to any party who intends to drive an off-road vehicle over this coastal land.

Regulations regarding activities in various Sensitive Coastal Areas (SCA's) (Notice 879, 880, 881 of 31 May 1996 and Notices 1526, 1528, 1529, 1530, 1531 of 27 November 1998): These regulations control activities identified as being potentially harmful (disturbance of vegetation, earthworks, dune stabilisation, dredging) by means of a permit system within specifically demarcated SCA's (to date the Outeniqua coastal region and the Pennington and Umtamvunaa areas on the KwaZulu-Natal south coast). The relevant provincial authorities and those regional and local authorities who have SCA's located within their jurisdictional areas currently administer the SCA regulations. The regulations apply to any party who intends to carry out any of the identified activities on a property situated within a SCA.

3.3.2.3 Description of Extent of Compliance

LEGISLATIVE MANDATE	EXTENT OF COMPLIANCE
White Paper for Sustainable Coastal Development in South Africa	<ul style="list-style-type: none"> A detailed business plan to action the White Paper is currently being developed. This business plan will be used to secure donor funds to supplement departmental funds.
General Policy for the Control of Off-Road Vehicles in the Coastal Zone	<ul style="list-style-type: none"> The overall extent of compliance (i.e. the enforcement of this policy) by local authorities is unsatisfactory. The policy is currently under review following the Minister of DEAT's statement earlier this year in which he expressed the desire to have off-road vehicles (ORV's) banned completely from beaches. The compliance target for the ORV policy is to have every responsible authority fully enforcing it in all areas to which it applies.
Regulations regarding activities in various Sensitive Coastal Areas (SCA's)	<ul style="list-style-type: none"> The overall extent of compliance with these regulations is less than satisfactory (with respect to both the responsible authorities and property-owners). There have been numerous cases where activities have been undertaken in SCA's without permits. In some cases, despite having been given clear guidelines by DEAT, the local authorities seem either reluctant to, or uncertain about, enforcing the regulations and dealing with offenders. The compliance targets for all SCA regulations is to have all the responsible authorities properly enforcing them, and all applicants fully complying with them, in all the SCA's.

3.3.2.4 Constraints and Limitations with Respect to Ensuring Compliance

CONSTRAINTS, AND LIMITATIONS	ACTIONS TO ADDRESS THESE
<i>White Paper for Sustainable Coastal Development</i> : Many of the White Paper's requirements cannot be effectively implemented until they are given legal effect	<ul style="list-style-type: none"> A study titled <i>Review of Legal Arrangements required to implement the White Paper for Sustainable Coastal Development in South Africa</i> has been completed. This study investigates how best to implement the White Paper in law. Based on this study, terms of reference have been drawn up for the appointment of legal drafters to draft new legislation to give effect to the White Paper.
<i>General Policy for the Control of Off-Road Vehicles in the Coastal Zone</i> : DEAT is responsible for ensuring compliance by the provinces which, in turn, must ensure compliance by the local authorities. Both DEAT and the provinces lack capacity to do this effectively. The majority of local authorities are not complying with the Policy's requirements.	<ul style="list-style-type: none"> The Minister's intention to ban vehicles on beaches, once enacted in law, will repeal the General Policy. This will relieve DEAT and the provinces from their responsibility to ensure compliance with the Policy's many requirements. However, new legislation may also assign responsibilities to DEAT and the provinces to ensure compliance by provincial and local authorities respectively.
<i>Regulations controlling potentially harmful activities within Sensitive Coastal Areas</i> : These regulations apply to any party who intends to remove/disturb vegetation, undertake	<ul style="list-style-type: none"> DEAT Coastal Management has published comprehensive guidelines and developed a computer-based decision-support system to assist authorities that implement the regulations

CONSTRAINTS AND LIMITATIONS	ACTIONS TO ADDRESS THESE
earthworks, dredge, or stabilise dunes within any of the specifically demarcated Sensitive Coastal Areas (SCA's). Permission is in most cases granted with certain appropriate conditions. Local authorities have delegated powers for decision-making where the permit applicants are individual private landowners. Where local authorities themselves are the applicants, then decision-making is at provincial level. DEAT is responsible for monitoring implementation and ensuring compliance by both the provinces and local authorities	within SCA's. Improvements can still be made to the regulations, with respect to the definitions of the activities, the demarcation of SCA boundaries, the streamlining of the permit application procedure, and clarification regarding the enforcement provisions. Some local authorities lack capacity and expertise to administer the regulations effectively. There also appears to be some confusion within the KwaZulu province as to which of their offices must issue permits to local authorities. A full review meeting with all affected authorities will take place early in 2001 to address difficulties with implementation.

3.3.2.5 Programmes for Implementation/Ensuring Compliance

A strategy for implementing the White Paper for Sustainable Coastal Development has been formulated. Key objectives for the next 4 years include:

- Increased contribution of coastal resources to GDP
- Increased number and security of coastal based livelihoods increased
- Availability of basic services increased in coastal communities
- Coastal ecosystems and resources managed in a sustainable manner

PRIORITY PROGRAMMES 2000 –2004	OUTPUTS	TIMEFRAME
Institutional capacity project	Provincial co-ordinators in all provinces catalyse action in coastal provinces	2001
	Provincially representative Coastal Working Groups established and functioning effectively in all provinces	2001
	Local coastal forums emerge and effectively contribute to co-management of coastal resources	2002
Legal reform project	Review of current system and recommendations for change completed	2001
	Appropriate system implemented	2002
	Institutional support and guidance for legislation provided	2002
Awareness programme	Awareness programmes implemented	2002
	Quarterly newsletter produced	2002
Education and training programme	Education and training programmes implemented	2002
Monitoring programme	National programme to monitor State of the Coast developed	2001
Information and Decisions Support System (I&DSS)	System implemented	2003
Applied research	Applied coastal research thrust established through SANCOR	Ongoing
	Research outputs inform implementation activities	Ongoing
Regulations for controlling the off-road use of vehicles on the coast	Draft regulations published for comment	2001
	Final regulations promulgated	2001
Further development of the SCA regulations	A standardised "blueprint" or "template" for the generic component of the SCA regulations developed	2001

PRIORITY PROGRAMMES 2000 -2004	OUTPUTS	TIMEFRAME
	NEMA-compliant regulations for the currently existing SCA's re-promulgated (namely Outeniqua, Outeniqua Extension, Pennington and Umtamvuna)	2002
	Regulations for future SCA's promulgated e.g. Langeberg region, Jeffreys Bay-PE area, remainder of Hibiscus Coast	2002

3.3.2.6 Arrangements for Co-operation

White Paper for Sustainable Coastal Development in South Africa, 1999

GOVERNANCE PARTNERS	NATURE OF CO-OPERATION	ARRANGEMENTS
National and provincial government departments responsible for coastal management	<p>Ensure policy implementation through the work of appropriate national and provincial departments.</p> <p>Ensure that coastal management principles and objectives are integrated into the Environmental Implementation and Management Plans of national and provincial departments.</p> <p>Ensure policy implementation is co-ordinated at national and provincial levels</p>	<ul style="list-style-type: none"> CEC Coastal Management Sub-committee chaired at national level by DEAT.
Provincial departments responsible for coastal management. Involvement of non-governmental stakeholders in each province.	<p>Co-ordination between provincial lead departments and other departments responsible for coastal management.</p> <p>Advise provincial lead department on policy implementation. Increase dialogue, co-operation, co-ordination and integration between key governmental and non-governmental role players in the province.</p>	<ul style="list-style-type: none"> Coastal Working Groups chaired by provincial lead agents for coastal management.
Coastal role-players at local level, including government, business and civil society	Co-operation between sectors and better co-ordination of aspects of local government work related to the coast.	<ul style="list-style-type: none"> Local coastal forums

Regulations regarding activities in various Sensitive Coastal Areas (SCA's), 1998

This function provides general guidance and assistance to those local and regional authorities that administer the Regulations. The relevant provincial departments also provide assistance in the evaluation of applications on request from local authorities.

GOVERNANCE PARTNERS	NATURE OF CO-OPERATION	ARRANGEMENTS
Provincial government departments responsible for environmental management	<p>Ensure implementation of the SCA regulations by:</p> <p>Evaluating/processing permit applications by local authorities</p> <p>Overseeing (assisting where necessary) the administration of the regulations by local authorities.</p>	<ul style="list-style-type: none"> CEC Coastal Management Sub-committee chaired at national level by DEAT.
Local authorities with	Ensuring implementation of the SCA	<ul style="list-style-type: none"> Coastal Working Groups

GOVERNANCE PARTNERS	NATURE OF CO-OPERATION	ARRANGEMENTS
SCA's under their jurisdiction.	regulations by evaluating/processing permit applications by private landowners.	chaired by provincial lead agents for coastal management.
Non-governmental coastal stakeholders / role-players at local level.	Playing a "watchdog" role in helping to check that: Local authorities are properly implementing the SCA regulations Activities are being legally undertaken within SCA's, and Permit conditions are being adhered to.	<ul style="list-style-type: none"> Local coastal forums.

3.3.3 MANAGEMENT OF MARINE POLLUTION

3.3.3.1 *Description of Environmental Management Functions*

- Promote measures aimed at controlling and reducing the reduction of pollutants and alien species from shipping into the marine environment
- Control the dumping of waste and other matter into South Africa's coastal waters by implementing the provisions of the London Convention and Protocol
- Develop and maintain the capacity of South and Southern Africa to respond to oil spills
- Co-ordinate responses to oil spills, monitor their incidence and promote measures to reduce them
- Promote measures aimed at controlling and reducing the introduction of pollutants from land-based sources into the marine environment
- Promote measures aimed at controlling and reducing the introduction of pollutants from offshore mining activities (oil & gas, diamonds etc) into the marine environment.

3.3.3.2 *Description of Specific Environmental Laws, Norms or Standards Applied by this Function*

Marine Pollution (Control and Civil Liability) Act 6 of 1981: This Act gives the Minister of Transport Affairs wide-ranging powers regarding the prevention of oil pollution. However, in terms of the South African Maritime Safety Authority Act 5 of 1998, the majority of these functions are transferred to the South African Maritime safety Authority. Section 52 of the SAMSA Act, however, delegates the responsibility for combating pollution of the sea and shoreline by oil to the Minister of Environmental Affairs and Tourism. This gives the Minister of DEAT specific responsibility for environmental protection and clean-up aspects of oil spills. The responsibility for initiating and co-ordinating the necessary actions to effect protection and clean-up operations lies with the Departmental Officers to whom the Ministerial powers have been delegated. Various functions may also be delegated to Local Authorities and other relevant bodies through the oil spill contingency plans.

Protocols under the Abidjan and Nairobi Conventions/ SADC Protocol: Oil spill contingency planning, training and response in the region.

Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter (London Convention)/ Dumping at Sea Control Act 73 of 1980: The Convention aims for the effective control of all marine pollution by obliging parties to take practical steps to prevent pollution of the sea by dumping (in this context, dumping covers cases where waste is loaded onto a vessel or aircraft for the purpose of disposal at sea; or the disposal of vessels or aircraft themselves at sea). It's provisions are brought into force locally by the Act which is administered by the sub-Directorate. The Act provides for the regulation of dumping activities through a permitting system.

Currently, this function has no legal jurisdiction over *land-based sources* of marine pollution although they constitute 80% of the marine pollution problem. This lack of legal jurisdiction means that the management of marine pollution is highly fragmented making it impossible to adopt an holistic and integrated approach. This could be partially addressed through DEAT's Law Reform process. There is also no International Convention or other legal instrument dealing with land-based sources of marine pollution due to the decision taken internationally that land-based sources of pollution be addressed at

the regional rather than the global level. On the other hand, there is a Global Programme of Action on Land-based Sources, which South Africa should be participating in. At the same time, though, it is important for South Africa to accede to and participate in the Abidjan and Nairobi Conventions/Regional Seas Programmes and assist in the development of new Protocols to deal with land-based sources.

3.3.3.4 Description of Extent of Compliance

LEGISLATIVE PROVISIONS	EXTENT OF COMPLIANCE
Marine Pollution (Control and Civil Liability) Act 6 of 1981	<ul style="list-style-type: none"> The sub-Directorate is reasonably well-placed to fulfil these responsibilities, although there is a need to broaden the base of expertise in this field by having greater involvement of the Provinces
Dumping at Sea Control Act 73 of 1980	<ul style="list-style-type: none"> The permitting system is in place, but there needs to be an improvement in the enforcement capability. In addition, the legislation needs to be amended to bring it in line with the provisions of the 1996 Protocol.

3.3.3.4 Constraints and Limitations with Respect to Ensuring Compliance

CONSTRAINTS AND LIMITATIONS	ACTIONS TO ADDRESS THESE
<p><i>Land-based pollution sources</i> Land-based sources of marine pollution constitutes 80% of the marine pollution problem. However, this programme is being scaled down at present due to resource constraints.</p>	<p>Urgent attention needs to be given to the following:</p> <ul style="list-style-type: none"> The development of Protocols on Land-based sources under the Nairobi and Abidjan Conventions Participation in the Global Programme of Action on Land-based Sources. Development of a national programme of action on land-based sources. Development of a policy on Marine Disposal in collaboration with the Department of Water Affairs and Forestry
<p><i>Provincial involvement</i> There is a need to involve the relevant provincial departments in management of marine pollution, and in enforcement of the relevant legislation</p>	<ul style="list-style-type: none"> This should be taken up at MINMEC and MINTEC meetings

3.3.3.5 Programmes for Implementation/Ensuring Compliance

Marine Pollution (Control and Civil Liability) Act 6 of 1981

Oil spill response

- DEAT has contracted out the provision of aerial maritime surveillance and vessels for the spraying of dispersants
- Updating of Oil Spill Contingency Plans to optimise the response to emergencies
- Updating and computerisation of Coastal Sensitivity atlas
- The Regional Oil Spill Contingency Planning project aims to develop capacity for oil spill response in the Indian Ocean Islands. South African is contributing expertise to the project at the request of the World Bank.
- A sub-Regional Oil Spill Contingency Plan under the BCLME project.

Ballast water management

South Africa is participating in the Ballast Water Management Project which aims to assist countries with the implementation of IMO Guidelines of Ballast Water. South Africa is one of six participating countries, the others being Brazil, China, India, Iran, and Ukraine.

PRIORITY PROGRAMMES 2000 – 2004	OUTPUTS	TIMEFRAME
Oil spill response	Participation in the Regional Oil Spill Contingency Planning Project	2002
	Oil Spill Contingency Plans revised to bring them in line with new Local Government structures	2002
	Training in oil spill response provided	Ongoing
	Dispersant spraying vessels combined with the fisheries patrol function for cost-effectiveness introduced	2003
	Directory of oil spill response resources developed	2001
	Computer-based, updated coastal sensitivity atlas developed	2002
Ballast water	A Ballast Water Management Plan for Saldanha Bay and possibly other South African ports developed and implemented	2003
	Greater awareness of the ballast water problem, and marine alien invasions generally, both in South Africa and the region.	2003
Dumping at sea	Amendment of legislation Introduction of monitoring programmes on dump sites Development of protocols on sediment bioassays	2001 2001 2002

Land-based Sources of Marine Pollution: This programme is being scaled-down at present due to resource constraints

PRIORITY PROGRAMMES 2000 – 2004	OUTPUTS	TIMEFRAME
Benguela Current Large Marine Ecosystem Project aims to improve the management of the West Coast ecosystem from both a resource and pollution perspective. Involves South Africa, Namibia and Angola	Project implementation.	2001 – 2004
	Regional Working Group on Marine Pollution established	
	Demonstration projects on land-based sources implemented	
Permitting system	Inclusion of appropriate conditions in permit issued by the Department of Water Affairs and Forestry	Ongoing

3.3.3.6 Arrangements for Co-operation

Marine Pollution (Control and Civil Liability) Act 6 of 1981

GOVERNANCE PARTNERS	NATURE OF CO-OPERATION	ARRANGEMENTS
South African Maritime Safety Authority (SAMSA)	DEAT has a delegated responsibility to undertake activities in relation to the "combating" of oil spills at sea. Also provides advice to SAMSA on other potential environmental impacts of shipping (e.g. Ballast water) and on measures aimed at reducing such impacts.	▪ Bi-annual meetings of a Liaison Committee
Oil and shipping	DEAT assists in the compilation of oil spill	▪ Ad hoc assistance where

GOVERNANCE PARTNERS	NATURE OF CO-OPERATION	ARRANGEMENTS
industries, Offshore oil and gas industries	contingency plans and in their implementation. Also provides advice on the environmental aspects of new legislation, both local and internationally, and occasionally receives applications to dump soiled cargo.	necessary
Legal and insurance representatives of the maritime industry	During oil spill incidents DEAT consults with their technical advisors to ensure the implementation of appropriate measures, and then verifies and coordinates the submission of insurance claims following such incidents.	▪ Ad hoc assistance where necessary
Companies involved in the development and supply of oil spill response products	DEAT is involved in the evaluation of new products and is compiling a directory of available resources.	▪ Ongoing meetings as required
South African Bureau of Standards	DEAT is working with the SABS on the development of new specifications for oil spill dispersants.	▪ Ongoing meetings as required
Provincial and local authorities	DEAT Works closely with these authorities during clean-up operations after an oil spill. Also provides advice to these bodies on the control and prevention of marine pollution from land-based sources.	▪ Ongoing meetings as required
SADC Committee of Transport and Communications	DEAT has been involved in discussions at the regional level aimed at enhancing cooperation in the maritime field, such as the development of capacity to respond to oil spills.	▪ Ongoing meetings as required
NGO's: SANCCOB, IFAW, Wildlife Society	DEAT works closely with SANCCOB and others to improve attempts to reduce impacts of oil spills on wildlife.	▪ Ad hoc assistance where necessary
Contractors (for example Smit Pentrow Marine, NAC)	DEAT currently manages two major contracts with Smit Pentrow Marine and NAC for the provision of maritime surveillance and an oil-spill dispersion capability.	▪ Quarterly Liaison Committee Meetings
Portnet	The ports are required to have oil spill contingency plans in place, and to report any spills to DEAT. Portnet is also involved in the implementation of the ballast Water Management project.	▪ Ad hoc assistance where necessary
International Maritime Organisation	International regulation of shipping matters	▪ Meetings every 8 months

Dumping at Sea Control Act 73 of 1980/ Convention on the Prevention of Marine Pollution by Dumping Wastes and Other Matters (London Convention)

GOVERNANCE PARTNERS	NATURE OF CO-OPERATION	ARRANGEMENTS
Contracting Parties to the London Convention	Development of amendments to the Convention/ Protocol; guidelines for implementation; technical co-operation	▪ Bi-annual meetings
Shipping industries	Applications to dump spoiled cargo.	▪ Ongoing
Portnet	DEAT provides advice on a number of aspects of environmental management in	▪ Ad hoc meetings

GOVERNANCE PARTNERS	NATURE OF CO-OPERATION	ARRANGEMENTS
	ports. The main focus of the service is on the development of guidelines and assessment procedures related to permit requirements for the dumping of dredged material at sea.	
South African National Defence Force	The SANDF regularly submit applications to dump obsolete vessels at sea as part of their target practice programme.	▪ Ongoing

Land-based sources of pollution

GOVERNANCE PARTNERS	NATURE OF CO-OPERATION	ARRANGEMENTS
Department of Water Affairs and Forestry	DEAT provides advice on the potential impacts of maritime pollution from land-based sources and possible measures for the alleviation thereof.	▪ Technical Committees on specific pipelines and/ or water bodies (eg. False Bay)
UNEP/ GPA Office	International guidance on land-based sources; coordination of GPA.	▪ Ad hoc meetings/ Regional Seas Programmes
Contracting parties to Regional Conventions	Development of regional regulations	▪ Regional Seas Programmes

3.3.4 ANTARCTICA AND ISLANDS

3.3.4.1 *Description of Environmental Management Functions*

South Africa is one of 26 countries with a presence on Antarctica, with the SANAE IV base situated 150km inland of this territory. In addition, South Africa has research teams stationed on Gough Island (British territory) and Marion Islands (part of the Prince Edward Islands group over which South Africa exercises sovereignty). Scientists at these three stations are involved in a variety of studies including the impact of long-line fishing on seabird populations, krill distribution and cosmic rays.

The functions of the Directorate: Antarctica and Islands are to:

- Provide scientific, liaison, logistical, administrative and personnel management and support to the South African National Antarctic Programme (SANAP) and its international partners
- Manage South Africa's interests in Antarctica. This is crucial as international control/influence over the Antarctic expands and to avoid negative impacts on national interest without due participation
- Maintain a base on the Antarctic continent (SANAE IV)
- Maintain a presence on Marion Island as a national asset with economic and regional interests
- Manage the Prince Edward Islands, and the surrounding Exclusive Economic Zone, as South African territory in accordance with the Prince Edward Islands Management Plan (PEIMP)
- Account for geographic considerations. South Africa is "downstream" and directly adjacent to any potential impacts from human or environmental effects in Antarctica and the Southern Ocean. Especially important is the sustainable sharing of resources and the improved prediction of global climate change effects.

3.3.4.2 *Description of Specific Environmental Laws, Norms or Standards Applied by this Function*

Antarctic Treaties Act 60 of 1996: This Act regulates South African activities in Antarctica and the sub-Antarctic in accordance with the provisions of the Antarctic Treaty and the Protocol on Environmental Protection to the Antarctic Treaty.

SCHEDULE 2: PROVISIONS OF THE DIFFERENT PROTOCOLS
<u>Antarctic Treaty</u> <ul style="list-style-type: none"> ▪ Article 1 (Use of Antarctica for peaceful purposes only) ▪ Article V (Prohibits nuclear explosions and disposal of radioactive waste material)

SCHEDULE 2: PROVISIONS OF THE DIFFERENT PROTOCOLS	
<u>Protocol on Environmental Protection to the Antarctic Treaty</u>	
<ul style="list-style-type: none"> ▪ Article 3 (Prohibits activities damaging the Antarctic environment) ▪ Article 7 (Prohibits mineral resource activities) 	
<u>Annex II to the Protocol on Environment Protection to the Antarctic Treaty: Conservation of Antarctic Fauna and Flora</u>	
<ul style="list-style-type: none"> ▪ Article 3 (Prohibits taking of or harmful interference with animals or plants) ▪ Article 4 (Prohibits introducing foreign animals or plants to the Antarctic) 	
<u>Annex III to the Protocol on Environment Protection to the Antarctic Treaty: Waste Disposal and Waste Management</u>	
<ul style="list-style-type: none"> ▪ Articles 2 – 6 (Regulates disposal or storage of waste) ▪ Article 7 (Prohibited products in Antarctica) 	
<u>Annex IV to the Protocol on Environment Protection to the Antarctic Treaty: Prevention of Marine Pollution</u>	
<ul style="list-style-type: none"> ▪ Article 3 (Prohibits discharge of oil or oily mixture into the sea) ▪ Article 4 (Prohibits discharge of noxious liquid or chemical substances into the sea) ▪ Article 5 (Prohibits disposal of garbage into the sea) ▪ Article 6 (Regulates discharge of sewerage into the sea) 	
<u>Annex V to the Protocol on Environment Protection to the Antarctic Treaty: Area Protection and Management</u>	
<ul style="list-style-type: none"> ▪ Article 3 (Regulates entry into Antarctic Specially Protected Areas) ▪ Article 8 (Prohibits damaging, removing or destroying Historic Sites and Monuments) 	
<u>Convention for the Conservation of Antarctic Seals</u>	
<ul style="list-style-type: none"> ▪ (a) Article 2 (Prohibits capturing or killing of seals) 	
<u>Convention on the Conservation of Antarctic Marine Living Resources</u>	
<ul style="list-style-type: none"> ▪ (a) Article II (Regulates harvesting of marine living resources) 	

Antarctic Treaty: South Africa ratified the Antarctic Treaty in 1960. The main purpose of this Treaty is to regulate relations among countries in Antarctica. Included in the provisions are that Antarctica shall be used for peaceful purposes only, to promote international cooperation and for the freedom of scientific investigation. Scientific research conducted in Antarctica is of benefit to South Africa as well as other littoral states of the Southern Hemisphere and the entire world, as results are analysed and utilised internationally. Through its membership of the Treaty, South Africa also ratified the Conventions on the Conservation of Antarctic Marine Living Resources and for the Conservation of Antarctic Seals, as well as the Protocol on Environmental Protection to the Antarctic Treaty (See *Schedule 2 under the Antarctic Treaties Act 60 of 1996*).

Annual reports are required from Parties on the steps taken to implement the Protocol on Environmental Protection.

3.3.4.3 Description of Extent of Compliance

South Africa complies in part with the provisions set out in the Act, however, some regulations must still be made.

SCHEDULE 2: PROVISIONS OF THE DIFFERENT PROTOCOLS	EXTENT OF COMPLIANCE
<i>Antarctic Treaties Act 60 of 1996</i>	
Antarctic Treaty Article 1 (Use of Antarctica for peaceful purposes only) Article V (Prohibits nuclear explosions and disposal of radioactive waste material)	<ul style="list-style-type: none"> ▪ Complete compliance
Protocol on Environmental Protection to the Antarctic Treaty Article 3 (Prohibits activities damaging the Antarctic environment) Article 7 (Prohibits mineral resource activities)	<ul style="list-style-type: none"> ▪ Complete compliance – A Comprehensive Environmental Evaluation (CEE) and Environmental Impact Assessment (EAI) were undertaken prior to the construction of the SANAE IV base. An environmental audit of activities is

SCHEDULE 2: PROVISIONS OF THE DIFFERENT PROTOCOLS	EXTENT OF COMPLIANCE
	undertaken annually.
<i>Annex II to the Protocol on Environment Protection to the Antarctic Treaty: Conservation of Antarctic Fauna and Flora</i> Article 3 (Prohibits taking of or harmful interference with animals or plants) Article 4 (Prohibits introducing foreign animals or plants to the Antarctic)	▪ Complete compliance
<i>Annex III to the Protocol on Environment Protection to the Antarctic Treaty: Waste Disposal and Waste Management</i> Articles 2 – 6 (Regulates disposal or storage of waste) Article 7 (Prohibited products in Antarctica)	▪ Complete compliance – A waste management plan was developed for SANAP personnel in 1998. The plan provides procedures to coordinate waste handling during the summer months and to ensure that the potential impacts of waste in Antarctica are minimised.
<i>Annex IV to the Protocol on Environment Protection to the Antarctic Treaty: Prevention of Marine Pollution</i> Article 3 (Prohibits discharge of oil or oily mixture into the sea) Article 4 (Prohibits discharge of noxious liquid or chemical substances into the sea) Article 5 (Prohibits disposal of garbage into the sea) Article 6 (Regulates discharge of sewerage into the sea)	▪ Complete compliance – Replacement of rubber bladder fuel tanks with double-hulled tankers. All waste is returned to South Africa.
<i>Annex V to the Protocol on Environment Protection to the Antarctic Treaty: Area Protection and Management</i> Article 3 (Regulates entry into Antarctica Specially Protected Areas) Article 8 (Prohibits damaging, removing or destroying Historic Sites and Monuments)	▪ Complete compliance
III Convention for the Conservation of Antarctic Seals (a) Article 2 (Prohibits capturing or killing of seals)	▪ Complete compliance – No seals are killed or captured by South Africa
IV Convention on the Conservation of Antarctic Marine Living Resources (a) Article II (Regulates harvesting of marine living resources)	▪ Permits for fishing in the Exclusive Economic Zone around the Prince Edward Islands are allocated.

Environment Conservation Act 73 of 1989: In accordance with Section 18 of this Act, the Prince Edward Islands were declared Special Nature Reserves in 1995. The Prince Edward Islands Management Committee (PEIMC) meets twice a year to regulate activities on these Islands in accordance with the provisions of the PEIMP.

Antarctic Treaty: Annual Antarctic Treaty Consultative Meetings (ATCM) and Committee for Environmental Protection (CEP) meetings are attended by South Africa. South Africa also reports to the Antarctic Treaty System (ATS) and CEP on environmental activities and compliance through the submission of an annual Environmental Audit Report and CEE for the next season.

3.3.4.4 Programmes for Implementation/Ensuring Compliance

Antarctic Treaties Act 60 of 1996

PRIORITY PROGRAMMES 2000 – 2004	OUTPUTS	TIMEFRAME
Annual relief voyages	Relief voyage manuals in place for each voyage	On-going

Environment Conservation Act 73 of 1989

PRIORITY PROGRAMMES 2000 – 2004	OUTPUTS	TIMEFRAME
Management and conservation of Marion and Prince Edward Islands as Special Nature Reserves	Permits according to the four zones are issued to all visitors to the Islands	Ongoing
Replacement of Marion Island base	A CEE/EIA undertaken before the new base is built or partially replaced	

Antarctic Treaty

PRIORITY PROGRAMMES 2000 – 2004	OUTPUTS	TIMEFRAME
Meeting Antarctic Treaty obligations	Hosting of Antarctic Treaty Consultative Meeting Attendance of annual meetings	2002 or 2003 Annually
Development of new scientific research cycle	Research publications and reports produced Training of manpower – MSc's, PhD's – undertaken	Annually Annually

3.3.4.5 *Arrangements for Co-operation*Antarctic Treaties Act 60 of 1996

GOVERNANCE PARTNERS	NATURE OF CO-OPERATION	ARRANGEMENTS
Department of Foreign Affairs	Provides a diplomatic channel to Antarctic Treaty countries. This can be quite a lengthy process.	▪ Monthly contact
National Department of Public Works	Assist with construction and maintenance of three bases Relief voyages for construction and maintenance work Provide maps Experience routine maintenance and budgetary problems	▪ Weekly contact
South African Air Force	Provide air support during relief voyages. Hourly tariffs for air transport are very expensive. Operates	▪ Quarterly contact
South African National Defence Force	Participate in relief voyages Train expedition members (fire fighting, cooking) Provide medical supplies An effective partnership	▪ Monthly contact
South African Navy (SAN)	Provide logistical support for relief voyages An effective partnership	▪ Quarterly contact
National Department of Public Works: Government Garage	Supply transport requirements, before and after relief voyages. Vehicles provided are often not in good condition.	▪ Monthly contact
Department of Land Affairs	Provide maps and scientific advice. Maps are long overdue due to low priority.	▪ Monthly contact
Department of Mineral and Energy Affairs (Council for Geosciences)	Sends a representative to the Antarctica Management Committee (AMC) meeting. Consult on an ad hoc basis. Effective partnership.	▪ Annually

GOVERNANCE PARTNERS	NATURE OF CO-OPERATION	ARRANGEMENTS
Department of Arts, Science, Culture and Technology	Conduct Review of SANAP. Effective partnership	▪ Once off
Cape Town Municipality	Assists with waste disposal and the promotion of Cape Town as a Gateway to the Antarctic. Effective partnership.	▪ Three times per year
Prince Edward Islands Management Committee (PEIMC)	Members include: Departmental, Universities and co-opt members Effective partnership	▪ Meets formally twice a year
Non-governmental organisations (NGO's)	Provide information, advice and comments on an <i>ad hoc</i> basis. DEAT submits EIAs, etc. to NGO's Effective partnership	▪ As required

Antarctic Treaty

GOVERNANCE PARTNERS	NATURE OF CO-OPERATION(ARRANGEMENTS
Scientific Committee on Antarctic Research (SCAR)	International scientific forum. Effective partnership.	▪ Meetings held every two years
Council of Managers of National Antarctic Programmes (COMNAP)	International forum for managers of Antarctic programmes – Exchange of information, policy formulation and decision-making; very effective partnership.	▪ Meetings are held annually

Environment Conservation Act 73 of 1989: As mentioned previously, the PEIMC meets twice a year in the interests of the management and conservation of the Prince Edward Islands in accordance with the stipulations of the PEIMP.

3.4 CROSS-CUTTING AND SUPPORT FUNCTIONS (PLANNING AND CO-ORDINATION)

Functions of the Chief Directorate Planning and Co-ordination are to:

- Develop and implement an Environmental Capacity Building strategy
- Establish a system for consolidated and integrated environmental reporting for South Africa
- Develop a coherent system across government for the planning and co-ordination of sustainable development
- Give effect to legislative requirements in the policies on coastal management, biodiversity and pollution and waste management

3.4.1 ENVIRONMENTAL INFORMATION AND REPORTING

3.4.1.1 Description of Environmental Management Functions

- Develop an integrated State of the Environment Reporting System
- Co-ordinate the establishment of, and provide access to, key national environmental geo-referenced data-sets
- Establish the entry point to environmental information

3.4.1.2 Description of Specific Environmental Laws, Norms or Standards Applied by this Function

National Environmental Management Act 107 of 1998 (NEMA): Section 26 (1) and (2) deals with reports required by Parliament from the Minister of Environmental Affairs and Tourism:

- Annual report on international environmental instruments, including information on participation in international meetings, progress made with implementing international environmental instruments and legislative measures
- Annual Performance Report on Sustainable Development to meet government's commitment to Agenda 21. All relevant organs of state are required to provide the necessary information. The purpose of this report is to provide an audit of government's performance in respect of Agenda 21, review procedures for co-ordinating policies and budgets to meet Agenda 21 objectives and review progress on a public educational programme to support the objectives of Agenda 21.

Sections 31 (1) (a) and (b) refer to state of the environment reporting and access to information by the public and organs of state:

- Any person is entitled to have access to information held by the State and organs of state which relates to the implementation of NEMA and any other law affecting the environment. This includes information on actual and future threats to the environment, including any emissions to water, air or soil and the protection, handling, transportation, treatment, storage and disposal of hazardous waste and substances
- Organs of state are entitled to have access to information relating to the state of the environment and actual and future threats to the environment. This includes information on emissions to water, air or soil and the protection, handling, transportation, treatment, storage and disposal of hazardous waste.

UN Conference on Environment and Development: The most urgent mandate to come out of this conference was Agenda 21, which calls for sustainable development. Reporting on Agenda 21 is voluntary.

The Convention on Access to Information, Public Participation in Decision-making and Access to Justice in Environmental Matters (Aarhus Convention): The Convention has not been signed by South Africa. It provides guiding principles for access to information and environmental justice.

3.4.1.3 Description of Extent of Compliance

LEGISLATIVE PROVISIONS	EXTENT OF COMPLIANCE
National Environmental Management Act	
Annual Performance Report on Sustainable Development	▪ First report has to be completed by June 2001

LEGISLATIVE PROVISIONS	EXTENT OF COMPLIANCE
State of Environment Reporting	<ul style="list-style-type: none"> ▪ National State of the Environment Report completed for 1999. ▪ Provincial State of the Environment Reports completed for Gauteng, Mpumalanga, North West and KwaZulu Natal for 1999. ▪ City State of the Environment Reports completed for Cape Town, Durban, Johannesburg and Pretoria for 1999. ▪ State of Estuaries Report completed for 1999. ▪ State of Forests Report in progress. ▪ State of Rivers Report in progress.
Access to information	<ul style="list-style-type: none"> ▪ No system currently in place to monitor compliance

3.4.1.4 Constraints and Limitations with Respect to Ensuring Compliance

CONSTRAINTS AND LIMITATIONS	ACTIONS TO ADDRESS THESE
NEMA does not require City State of Environment reports. This creates problems as there are no obligations on cities to report on the state of their environments or to monitor their environments. In addition, there is no common set of indicators.	<ul style="list-style-type: none"> ▪ Proposed NEMA amendments will address frequency of reporting, mechanisms for reporting as well as guidelines for reporting
NEMA does not specify frequency of reporting. This is a problem as there is no indication as to when the next update will be required	<ul style="list-style-type: none"> ▪ Proposed NEMA amendment will include provisions on this and will be co-ordinated with EIP's and EMP's
Lack of reporting guidelines creates problems as spheres of government can currently report as they like, on any issue, in any format.	<ul style="list-style-type: none"> ▪ Would like to have guidelines so that reporting is harmonised and to the same standard, for example using the same framework for reporting and using same or similar indicators
There are currently no guidelines on access to information or a system to monitor compliance	<ul style="list-style-type: none"> ▪ Proposed NEMA amendments to provide for sections that deal with access to information, as suggested by the Aarhus Convention which provides guiding principles regarding access to information and environmental justice
NEMA requires an annual report of performance on sustainable development by government. The requested frequency is problematic.	<ul style="list-style-type: none"> ▪ Proposed NEMA amendments will address frequency of Performance Report on Sustainable Development

3.4.1.5 Programmes for Implementation/Ensuring Compliance

PRIORITY PROGRAMMES 2000 – 2004	OUTPUTS	TIMEFRAME
Performance Report on Sustainable Development	First Performance Report on Sustainable Development produced	2001
	NEMA Amendments addressing frequency of performance report gazetted	2001
	Centre for Environmental Information and Statistics established	2001
	GIS Internet presence established	2001
	Core set of environmental indicators identified	2002
	Core set of sustainability indicators established	2003
	System for monitoring and reporting on indicators established	2003
	Report on indicators submitted	2004

PRIORITY PROGRAMMES 2000 – 2004	OUTPUTS	TIMEFRAME
State of the Environment Report	State of the Environment Report produced every four years	On-going
	NEMA amendments to improve reporting gazetted	2001
	State of the Environment Reporting Guidelines published	2001
	Web presence to provide access to environmental information developed and operational	2001
Sustainable Development Report to the United Nations Commission on Sustainable Development	Establish a co-ordinating mechanism for sustainable development	2000
	Annual National Report on Sustainable Development produced in November each year	Annually
	Web presence to provide access to sustainable development information developed and operational	2001

3.4.1.6 Arrangements for Co-operation

The work of this function is conducted through the MINTEC Planning and Co-ordination Working Group.

GOVERNANCE PARTNERS	NATURE OF CO-OPERATION	ARRANGEMENTS
All national, provincial and local governments	National Departments and Provinces assist DEAT to compile the annual Report on Sustainable Development to the UN CSD	▪ Working Group III under the CEC (Planning and Co-ordination)
All national, provincial and local governments	National Departments and Provinces assist DEAT to compile the annual Performance Report on Sustainable Development on the implementation of Agenda 21	▪ Meetings when required
Dept of Water Affairs and Forestry	Geographic Information System (GIS) – correction of cadaster	▪ Meetings when required
Provinces	Exchange of GIS data	▪ Meetings when required
Cities of JHB, Cape Town, Durban, Pretoria	City State of the Environment Reports	▪ Regular meetings
Science Councils	Assist with preparing State of the Environment Reports	▪ Contractual arrangement
Government Communication Services	Host Departmental Web Site as well as State of the Environment Report. Regional offices used to distribute copies of the National State of the Environment Report	▪ Meetings when required
Dept of Foreign Affairs	Provide political guidance and logistical assistance to SA delegation to UN CSD	▪ Meetings when required

3.4.2 LAW REFORM, PLANNING AND CONCILIATION

3.4.2.1 Description of Environmental Management Functions

- Co-ordinate and facilitate the NEMA review and environmental law reform program
- Promote a coherent system across government for planning and co-ordination for sustainable development

- Give effect to the conflict management provisions of NEMA

3.4.2.2 *Description of Specific Environmental Laws, Norms or Standards Applied by this Function*

NEMA and environmental law reform: The promulgation of the National Environmental Management Act in 1998 laid the foundation for establishing a legislative framework that gives effect to the environmental management policy in the *White Paper on Environmental Management Policy*. The Department has now embarked on the 2nd phase of environmental law reform aimed at introducing new legislation in the areas of bio-diversity conservation, pollution and waste management and coastal management. This need has arisen from policy imperatives in the White Paper on the Conservation and Sustainable Use of South Africa's Biological Diversity, White Paper on Integrated Pollution and Waste Management.

NEMA and planning: Chapter 3 of NEMA requires certain listed national departments to submit Environmental Implementation Plans (EIPs) and Environmental Management Plans (EMPs). It further requires all provinces to prepare an EIP. Section 12 describes the purpose of these plans as (amongst others):

- Co-ordinating and harmonising the environmental policies, plans, programs and decisions of departments that exercise functions that may affect the environment or are entrusted with powers and duties aimed at promoting environmental management
- Giving effect to the principle of co-operative environmental governance;
- Securing the protection of the environment across the country.

Section 13 and 14 set out the contents of these plans, while section 15 describes the process of submission, scrutiny and adoption of the plans by the Committee for Environmental Co-ordination. Section 16 provides that every organ of state must exercise its functions substantially in accordance with the Environmental Implementation and Management Plans that it has submitted. This section further provides that the Director-General monitors compliance with the EIPs and EMPs.

Section 16(4) provides that municipalities must adhere to the relevant EIPs and EMPs and to the NEMA principles, in the preparation of any policy, plan or programme, including the Integrated Development Plan.

NEMA and conciliation: Chapter 4 provides for fair decision-making and conflict management. The Act:

- Provides 3 options for invoking conciliation (section 17)
- Gives guidelines on the conciliation process (section 18)
- Enables a disagreement to be referred directly to arbitration (section 19)
- Enables the Minister of Environmental Affairs and Tourism to initiate an investigation (section 20)
- Structures the discretion to refer a matter to conciliation (section 22)
- Requires the designation of an officer to provide information to the public on appropriate dispute resolution procedures (section 22)
- Requires the Director-General of DEAT to report annually to the Committee for Environmental Co-ordination (CEC) for the purpose of evaluating compliance and conflict management measures in respect of environmental laws (section 22).

3.4.2.3 *Description of Extent of Compliance*

LEGISLATIVE PROVISIONS	EXTENT OF COMPLIANCE
<i>NEMA and Planning</i>	
Preparing guidelines to assist Schedule 1 and 2 departments in preparing EIPs and EMPs	<ul style="list-style-type: none"> ▪ The CEC Sub-Committee on EIPs/EMPs was established in 1999. It met twice in 1999, during which time the date of submission of EIPs/EMPs was set, and the "Guidelines for Preparation of the First Edition EIPs/EMPs" were produced. The Committee has met 4 times in 2000 and has: <ul style="list-style-type: none"> ▪ Produced guidelines to assist the CEC in evaluating EIPs/EMPs ▪ Evaluated the Environmental Implementation and Management Plan submitted by the Department of Land Affairs (adopted by the CEC at its meeting of 21 July 00)
Evaluation of EIPs/EMPs:	
Providing a support service to the Committee for Environmental Co-ordination in evaluating the EIPs and EMPs	

LEGISLATIVE PROVISIONS	EXTENT OF COMPLIANCE
Preparing the Departmental EIP/EMP	<ul style="list-style-type: none"> Evaluated the Environmental Implementation Plan submitted by the Department of Defence (adopted by the CEC at its meeting of 15 September 00) Evaluated the Environmental Management Plan, submitted by the Department of Minerals and Energy (adopted by CEC at its meeting of 28 November 00)
Setting the date for submission of EIPs/EMPs	<ul style="list-style-type: none"> The Minister has extended the date for submission of EIPs/EMPs to 30 March 00, in terms of section 11(5) of the Act.
Monitoring compliance with EIPs and EMPs	<ul style="list-style-type: none"> The Act requires scheduled departments to report annually on the implementation of adopted EIPs and EMPs. The first of such annual reports will be due in March 2002. A system has not yet been put in place by the Department to ensure compliance with EIPs and EMPs.
<i>NEMA: Chapter 4: Fair Decision-making and Conflict Management</i>	
Designation of an officer to provide information to the public on dispute resolution mechanisms	<ul style="list-style-type: none"> A deputy director has been designated for this work
Establishment of clear and simple guidelines on procedures for referring a matter for conciliation	<ul style="list-style-type: none"> These are in preparation
Annual reporting on conciliation's	<ul style="list-style-type: none"> An annual report on environmental conflict management will be submitted at the end of the financial year

3.4.2.4 Constraints and Limitations with Respect to Ensuring Compliance

CONSTRAINTS AND LIMITATIONS	ACTIONS TO BE TAKEN
<p><i>Planning for environmental sustainability:</i> Labour intensive process of evaluating EIPs/EMPs</p> <p>No system in place for checking compliance with and implementation of EIPs/EMPs</p> <p>No system in place for facilitating local government compliance with EIPs/EMPs</p>	<ul style="list-style-type: none"> Investigate use of IT System to be developed System to be developed
<p><i>Conciliation and conflict management:</i> Requests for conciliation have been received. Procedures not yet in place and government-based conciliation advisors not yet trained to process these requests.</p>	<ul style="list-style-type: none"> Procedures and training to be completed urgently

3.4.2.5 Programmes for Implementation/Ensuring Compliance

This function is responsible for developing a coherent system across government for planning & co-ordination for sustainable development. Components of this system include:

- The National Strategy for Sustainable Development (NSSD)
- The National and Provincial Environmental Implementation and Management Plans
- Integration of environmental considerations into local government planning processes
- Monitoring and reporting on implementation
- Setting targets for environmental sustainability at national and provincial level

The 2 key instruments for setting targets for environmental sustainability at national and provincial level of government, are the National Strategy for Sustainable Development (NSSD) and the Environmental Implementation and Management Plans.

National Strategy for Sustainable Development (NSSD): The Department has initiated a process aimed at preparing the NSSD, in fulfilment of South Africa's commitment on Agenda 21 implementation, and as part of this country's preparation for the 10th Session of the Commission on Sustainable Development. The NSSD design phase is underway, with the following themes emerging:

- The NSSD should be designed as a vehicle for strengthening current policies, programmes and processes towards sustainable development. A particular emphasis should be on setting targets for sustainable development, and improving monitoring and national reporting and action against these targets
- The NSSD could be used as a mainstreaming tool, in particular to mainstream sustainable development targets into core economic strategies (i.e. trade, industry, finance etc).

Environmental Implementation and Management Plans: The NSSD will build on existing programmes that promote sustainable development, such as the Environmental Implementation and Management Plans. A key objective of the EIPs and EMPs is the establishment (by schedule 1 and 2 departments and provinces) of targets for environmental sustainability. Progress with the achievement of these targets must be reported annually.

Integrating environmental considerations into local government planning systems: Section 16(4) of NEMA requires that municipalities must comply with Provincial Environmental Implementation Plans, and with NEMA principles in the preparation of Integrated Development Plans and Land Development Objectives. The Department is presently conceptualising a capacity building facility, specifically set up to assist local authorities in integrating environmental considerations into local planning processes. A key focus of the facility is the provision of technical support for strategic environmental assessments in the early phase of preparation of Integrated Development Plans.

Implementation of the conciliation provisions of NEMA: The provisions on fair decision-making and conflict management in NEMA are:

- Part of the framework for co-ordination and co-operation in environmental governance
- A means of improving the quality of decisions that impact on the environment.

The intention is to encourage a consensus-seeking approach to decisions and actions that may impact on the environment, and to provide a built in safety valve when disputes arise, that enables parties to deal with disagreements quickly and constructively. In giving effect to these provisions, the DEAT seeks to create a system that:

- Is simple to use and easy to access
- Resolves disputes early, with the least bureaucracy and does not delay decision-making
- Provides opportunities for a range of interest-based conciliation procedures, cost-effective rights-based procedures such as arbitration) and fact-finding
- Includes a screening mechanism for determining whether conciliation is appropriate and what process would be most suited in that particular instance
- Includes preventative methods, such as improving communication skills and building peoples' capacity to practise collaborative problem solving techniques
- Includes a means of monitoring and evaluating the effectiveness and operation of the system.

PRIORITY PROGRAMMES 2000 – 2004	OUTPUTS	TIMEFRAME
National Strategy for Sustainable Development	Strategy completed	2002
Environmental Implementation/Management Plans	EIPs/EMPs of all schedule 1 and 2 departments evaluated, adopted and gazetted.	2002
	Implementation / compliance with EIPs/EMPs evaluated	2003
Implementation of NEMA conciliation provisions	Manual on use of NEMA conciliation provisions	2001
	Training for national and provincial government implementers (conciliation advisors) (in co-operation with the Environmental Capacity Building Unit)	On-going
	Conciliation interventions reported	On-going
	Annual report to Minister on implementation of chapter 4 of NEMA	Annually
	A proposal outlining the potential for the creation of an environmental tribunal as part of the Law Reform Programme	

PRIORITY PROGRAMMES 2000 – 2004	OUTPUTS	TIMEFRAME
Give effect to legislative requirements in the policies on coastal management, biodiversity and pollution and waste management	Draft NEMA Amendment Bill finalized	2001
	NEMA amendments promulgated	2002
	Strategy for implementing NEMA Amendments finalized	2003
	NEMA Amendments strategy implemented	2004

3.4.2.6 Arrangements for Co-operation

The work of this function is conducted primarily through the CEC two sub-committees, namely the EIP/EMP sub-committee and the Law Reform Sub-committee.

GOVERNANCE PARTNERS	NATURE OF CO-OPERATION	ARRANGEMENTS
All departments listed in schedules 1 and 2 of NEMA	Preparation of EIPs/EMPS and Evaluation of EIPs/EMPs Law reform programme	CEC Sub-Committee on EIPs and EIPs: meets approximately every 2 months to: evaluate EIPs and EMPs and to monitor compliance.
All Ministers, MECs and Local Councils who refer matters for conciliation in terms of NEMA	In many instances, referral of a matter for conciliation involves more than one government department. Co-operation is needed to define the terms of conciliation, and monitor the intervention.	Presently no formal arrangement. Co-operation is ad hoc, as required.

CHAPTER FOUR: ENVIRONMENTAL IMPLEMENTATION PLAN

4.1 INTRODUCTION

In Chapter One, the priority functions of DEAT, in terms of their affect on the environment, were identified. These functions include:

- Consumptive use of Marine Living Resources
- Mariculture
- Tourism.

For each of the priority function, the following information is provided:

- Key environmental policies and legislation associated with priority functions
- Compliance with policies and legislation
- Programmes and plans to ensure compliance, including resource requirements.

4.2 CONSUMPTIVE USE OF MARINE LIVING RESOURCES

4.2.1 POLICIES AND LEGISLATION TO MANAGE ENVIRONMENTAL IMPACTS

White Paper on a Marine Fisheries Policy for South Africa, 1997: It is a policy objective that South Africa should develop and maintain a cost-effective fisheries management structure with a broadly recognised acceptability that ensures that:

- All fisheries sector practices conform to relevant international standards, laws and treaties
- Levels and patterns of exploitation, determined on the basis of best available scientific information, do not jeopardise the soundness of the resource, its environment or ecosystem on which biodiversity and long-term optimal sustainable yields depend
- Long-term management plans, which include operational management procedures, be developed to ensure optimal utilisation of all significant living marine resources
- The harvesting of one species does not endanger the continue existence, or cause the substantial depletion of any other species, and a variety of regulatory measures be introduced to avoid such dangers including the full protection of species.

The following environmental management tools and regulations are provide for in the policy:

- Integrated environmental management principles will be applied to South African fisheries management
- In principle, the harvesting of any one species must not endanger the continued existence, or cause the substantial depletion of any other species
- Dumping of fish at sea and unauthorised transshipment of fish at sea will be prohibited
- Traditional and artisanal fishing practices will be identified, recognised and managed within resource limits
- The setting of fishing seasons shall be determined principally by biological factors, but will also take into account economic factors
- Appropriate fishing gear and methods of harvesting must be used and innovative techniques developed to increase the selectivity of fishing for desired species and sizes of fish. Where feasible, environmentally safe fishing gear will be use with a view to maintaining biodiversity and conserving ecosystems

National Environmental Management Act, 1998: *NEMA principles* relevant to the management of consumptive resources include the following:

- Under the theme *sustainable development*, consideration needs to be given to waste and pollution, the use of renewable resources, adoption of a cautious approach, and the anticipation of negative impacts
- *Integration of environmental considerations into decision-making* requires environmental management to be integrated and impacts to be assessed and ensuring environmental responsibility throughout lifecycle of the plan or programme.
- *Participation, empowerment and transparency* needs to address participation of interested and affected parties in decision-making, consider interests, needs and values, community well-being

and empowerment, access to information, transparent decision-making, holding the environment in public trust, and ensuring resources serve the public interest

- *Environmental Justice* requires equitable access to environmental resources to meet basic needs, safe-guarding workers rights to refuse environmentally hazardous work, applying the polluter pays principle and placing needs of people to be at the forefront of environmental management
- Minimising the disturbance of ecosystems and loss of biodiversity and applying specific management approaches for vulnerable ecosystems is required for the theme of *ecological Integrity*
- *International responsibilities* need to be discharged in the public interest
- *Environmental Impact Assessments*: The National Environmental Management Act and the Environmental Conservation Act require environmental impact assessments to be undertaken for any activity which may significantly affect the environment.

The Marine Living Resources Act 18 of 1998 provides for the conservation of marine ecosystems, the long-term sustainable utilisation of marine living resources and the sustainable access to exploitation, utilisation and protection of certain marine living resources. For this purpose, it aims to provide for the exercise of control over marine living resources in a fair and equitable manner to the benefit of all citizens of South Africa.

Objectives and principles of this Act include the achievement of ecologically sustainable development; the conservation of marine living resources for both present and future generations; the application of precautionary measures; the protection of the ecosystem as a whole; and the need to preserve marine biodiversity.

Relevant environmental management sections include:

- Determining allowable catches and applied effort (Section 14)
- Declaring fisheries management areas (Section 15)
- Introducing emergency measures where stocks of fish or aquatic life are endangered (Section 16)
- Enabling the Minister to require environmental impact assessment reports prior to granting of rights for marine living resource usage (Section 18 (3))
- Determining sustainable conservation and management measures, including the use of a particular type of vessel, gear or area of fishing (Section 18 (7))
- Making regulations on the formula's for commercial fishing rights (Section 31 (3) (a))
- Establishing a Fisheries Transformation Council the purpose of which is to facilitate the achievement of fair and equitable access to the rights referred to in Section 18 (Section 29)
- Ensuring that all international agreements entered into adhere to total allowable catch plans and require foreign fishing vessels to take necessary measures to comply with legislation relating to fishing in South African waters (Section 38)

Regulations in Terms of the Marine Living Resources Act 18 of 1998 provide a range of prohibitions, restrictions, limits and permitting requirements aimed at managing the environmental impact of fishing activities.

The Marine Living Resources Act of 1998 largely repealed the Sea Fishery Act 12 of 1988. A few provisions remain relating to levies on fish and seashells.

United Nations Law of the Sea Convention (UNCLOS): South Africa ratified this Convention in 1997. UNCLOS established the right of coastal states to an Exclusive Economic Zone (EEZ). It does not establish any international programmes but rather represents a codification of international law rules for states to observe in marine-related operations. The convention does, however, institutionalise an International Sea Bed Authority and a Commission on the Limits of the Continental shelf to oversee the exploration and exploitation of deep-sea bed minerals. Important provisions to be addressed by South Africa include:

- Ensuring the proper conservation of living resources in the South African Exclusive Economic Zone (EEZ)
- Co-operating with international organisations
- Maintaining or restoring fish stocks in the EEZ level to a maximum sustainable yield (MSY) and to ecologically sustainable levels taking into account generally recommended international minimum standards

- Exchanging scientific information and data relevant to the conservation of fish stocks

The Agreement for the Implementation of the Provisions of the United Nations Law of the Sea Convention Relating to Management and Conservation of Straddling Fish Stocks and Highly Migratory Fish Stocks has as its primary objective to ensure the long-term conservation and sustainable use of straddling fish stocks and highly migratory fish stocks. This Agreement is by far the most detailed and comprehensive international instrument on conservation and management of fish stocks such as valuable South African fish resources. The agreement has been drafted in such a way as to strengthen the role played by regional fisheries organisations in ensuring that the management of high seas fish stocks does not compromise the sustainable utilisation of related stocks in areas adjacent to those being managed by coastal states (in other words to South African Exclusive Economic Zone).

The Convention on Biological Diversity in Marine and Coastal Habitats requires the following:

- This Convention requires countries to use fisheries and other marine resources in a sustainable manner
- Fisheries should be managed by setting ecologically sustainable levels of use, managing ecosystems rather than single stocks, reducing by-catch and incidental impacts on non-target species and habitats, and eliminating subsidies that encourage over-fishing.
- Where artisanal fisheries are sustainably managed, protect sustainable management systems through measures such as legal recognition and enforcement of community-based resource management systems, and recognition and maintenance of traditional sea tenure.

4.2.2 COMPLIANCE WITH LAWS TO MANAGE ENVIRONMENTAL IMPACTS

Chapter 3 of the Marine Living Resources Act sets in place a variety of mechanisms and procedures to facilitate fisheries planning and management for the commercial, recreational and subsistence fishing sectors. makes provision for the Minister to determine total allowable catch and total applied effort, to declare special management areas and to suspend fishing in the case of an emergency that endangers stocks. Examples of actions taken to promote compliance are listed below.

LEGISLATIVE PROVISIONS	ACTIONS TO PROMOTE COMPLIANCE
Fisheries planning Determination of allowable catches and applied effort (s14) Declaration of fisheries management areas (s15) Emergency measures (s16) Priority fishing areas (s17) Commercial fishing (s21 and 22)	<ul style="list-style-type: none"> ▪ Zonation ▪ Establishment of closed seasons ▪ Establishment of areas closed to fishing ▪ Setting of total allowable catch ▪ Setting of total allowable effort ▪ Permit conditions (including gear Restrictions) ▪ Code of conduct for each fishery ▪ Operational Management Procedures for each fishery
Recreational fisheries (s20)	<ul style="list-style-type: none"> ▪ Setting of bag limits ▪ Establishment of closed seasons ▪ Establishment of areas closed to fishing ▪ Fishing gear restrictions ▪ Permit conditions
Subsistence fisheries (s 19)	<ul style="list-style-type: none"> ▪ Any of the above

The following table demonstrates the linkages between NEMA principles and the fundamental policy principles for the management of consumptive resources as set out in the Marine Fisheries Policy and Marine Living Resources Act. The table also indicates the actions taken by this function to ensure compliance with the NEMA principles which have particular relevance to the management of consumptive resources.

RELEVANT NEMA PRINCIPLES	PRINCIPLES FROM MARINE POLICIES AND LEGISLATION	ACTIONS TAKEN TO COMPLY WITH NEMA PRINCIPLES
<p><i>Sustainable development</i> Sustainable use of renewable resources</p> <p>Risk averse & cautious approach</p> <p>Negative impacts to be anticipated</p>	<p><i>Policy</i> Limit entry to protect and safeguard the resource and environment Precautionary principle <i>Act</i> Ecologically sustainable development Conserve resources for present and future generations</p>	<ul style="list-style-type: none"> ▪ Conservative approach to establishing new fisheries (by issuing experimental permit; followed by pilot fishery prior to allocation of commercial permit) ▪ Conservative approach to setting Total Allowable Catch or Effort.
<p><i>Integration of environmental considerations into decision-making</i> Environmental impacts to be assessed</p> <p>Environmental responsibility throughout lifecycle of plan or programme.</p>	<p><i>Act:</i> Minister may require an environmental impact assessment prior to granting of rights for marine living resource usage</p>	<ul style="list-style-type: none"> ▪ Shift from single species management approach to multiple-species or ecosystem management approach
<p><i>Participation, empowerment and transparency</i> Participation of interested and affected parties in decision-making</p> <p>Consider interests, needs and values</p> <p>Community empowerment</p> <p>Access to information</p> <p>Transparent decisions</p>	<p><i>Policy</i> Transparency and accountability in marine resource management Allocation of rights to be impartial Stakeholder participation in management of marine resources</p>	<ul style="list-style-type: none"> ▪ Establishment of a multi-stakeholder Consultative Advisory Forum to advise on management and development of the fishing industry; marine living resources management; establishment and amendment of operational management procedures; allocation of money from the Marine Living Resources Fund. ▪ Establishment of local fishing forums to manage subsistence fishing
<p><i>Environmental Justice</i> Equitable access to environmental resources to meet basic needs</p> <p>Workers right to refuse environmentally hazardous work</p> <p>Polluter pays principle</p> <p>Needs of people to be at the forefront of</p>	<p><i>Policy</i> Access to marine resources shall be fair and equitable Holders of fishing rights will provide acceptable conditions of employment for all employees <i>Act</i> Emphasis on permits for new entrants (historically disadvantaged sectors) Establish zones for</p>	<ul style="list-style-type: none"> ▪ Transformation process for rights allocation (revised allocation procedures) ▪ Selection criteria (per resource) to ensure equitable access ▪ Special attention given to promoting access to and use of resources on subsistence basis

RELEVANT NEMA PRINCIPLES	PRINCIPLES FROM MARINE POLICIES AND LEGISLATION	ACTIONS TAKEN TO COMPLY WITH NEMA PRINCIPLES
environmental management	subsistence fishing	
<i>Ecological Integrity</i> Minimise disturbance of ecosystems and loss of biodiversity Specific management for vulnerable ecosystems	Act Protect ecosystem as a whole Preserve marine biodiversity	<ul style="list-style-type: none"> ▪ Development of multi-species management system ▪ Promotion, development and management of Marine Protected Areas

4.2.3 CONSTRAINTS AND LIMITATIONS WITH RESPECT TO ENSURING COMPLIANCE

CONSTRAINTS AND LIMITATIONS	ACTIONS TO ADDRESS THESE
<p><i>Single species approach vs. ecosystem approach</i></p> <p>The approach taken by South Africa in the management of marine living resources is single species management. While successful, this approach ignores interaction between species and marine eco-systems. A new approach, multi-species management, is premised on maintaining the integrity of the eco-system. However:</p> <ul style="list-style-type: none"> ▪ There is little knowledge of un-exploited situations; marine protected areas are a crucial tool ▪ There is a lack of information on ecosystem indicators (including seabirds, seals and plankton) ▪ A long term framework is needed for implementation 	<ul style="list-style-type: none"> ▪ South Africa will continue with the single species approach in the interim, but aims to: ▪ Define ecosystem management objectives and models ▪ Incorporate ecosystem management objectives in single-species management plans ▪ Devise institutional mechanisms to ensure ecosystem objectives are met ▪ Long-term framework to be developed
Inadequate human resources	<ul style="list-style-type: none"> ▪ Attach higher levies to fishing rights to provide financial resources for contacting in personnel

4.2.4 PROGRAMMES TO MANAGE ENVIRONMENTAL IMPACTS: MONITORING, CONTROL AND SURVEILLANCE OF FISHING ACTIVITIES

PRIORITY PROGRAMMES 2000-2004	OUTPUTS	TIMEFRAME
Vessel monitoring System	Effective monitoring of foreign flagged vessels within the EEZ	Ongoing
Monitoring of commercial catches	Effective monitoring of catches at landing sites (in accordance with quota limitations)	Ongoing
International airport surveillance	Effective monitoring and control of marine product leaving the SA economic zone	Ongoing
Surveillance and special operations	Special investigations on serious economic offences in respect of marine resources	Ongoing
Honorary Marine Conservation Officers	Policy guidelines and system in place to enlist members of the public as honorary conservation officers;	2001s
Training for Marine Conservation officers	Training Programmes in place	2001

4.3 RESOURCE DEVELOPMENT (MARICULTURE)

4.3.1 POLICIES AND LEGISLATION TO MANAGE ENVIRONMENTAL IMPACTS

The Marine Living Resources Act 18 of 1998, provides Marine and Coastal Management (MCM) with the mandate and responsibility to facilitate and co-ordinate the advancement of mariculture in South Africa and provides for a principle of national control and co-ordination of mariculture.

The Act specifies that a right to engage in mariculture activities has to be obtained from MCM with control of these rights effected through the issue of permits. Rights may be obtained for a period of up to 15 years but permits are renewable annually. The Act specifies, amongst others, the following:

- An EIA may be required by MCM for potential mariculture activities
- The use of genetically modified organisms in mariculture requires authorisation from MCM.

Regulations have been drafted in terms of this Act that address issues such as requirements for applications, potential environmental assessments, precautionary use of genetically modified organisms and chemicals, the release of non-indigenous fish into SA waters and control of notifiable diseases.

Legislation for land-based mariculture activities falls under the jurisdiction of the Department of Agriculture.

Under the Environment Conservation Act 73, 1989, certain mariculture activities can be classified as Section 21 activities (Section 21 activities being those regarded as having a potentially substantial detrimental effect on the environment, and may require a scoping report and Environmental Impact Assessment). The following Section 21 activities are applicable to mariculture:

- The concentration of livestock in a confined structure for the purpose of mass commercial production
- The rezoning of areas for rural or agricultural use
- Discharges for pump ashore facilities based on the seashore.
- The importation of any plant or animal that has been declared a weed or invasive
- The genetic modification of any organism.

The Sea Shore Act 21, 1935, requires that a lease agreement be established for mariculture on the seashore or in the sea. Relevant authorities include MCM, Provincial Administration and Portnet.

Being a signatory to the Convention on Biological Diversity obliges South Africa to assess the ecosystem effects of fishing and to conserve its rich bio-diversity heritage.

4.3.2 COMPLIANCE WITH LAWS TO MANAGE ENVIRONMENTAL IMPACTS

LEGISLATIVE PROVISIONS	ACTIONS TAKEN TO COMPLY
<i>Marine Living Resources Act, 1998</i>	
Right to engage in mariculture activities has to be obtained from MCM with control of these rights effected through the issue of permits	<ul style="list-style-type: none"> ▪ MARAG group of experts (Mariculture staff and secondees) advise on the issuing of rights to a new applicant based on the environmental viability of the venture – interact with provincial government for a valued assessment
EIAs required for potential mariculture activities	<ul style="list-style-type: none"> ▪ EIAs may be required; an Environmental Scoping Report is required.
Use of genetically modified organisms in mariculture requires authorisation from MCM	<ul style="list-style-type: none"> ▪ No policy
<i>Environment Conservation Act, 1989</i>	
Mariculture activities classified as Section 21 activities may require an environmental impact assessment	<ul style="list-style-type: none"> ▪ Interact with provincial environmental governments to ensure EIAs are undertaken

LEGISLATIVE PROVISIONS	ACTIONS TAKEN TO COMPLY
<i>Sea Shore Act, 1935</i>	
Requirements for lease agreements	<ul style="list-style-type: none"> Public participatory meetings are held; environmental scoping reports are produced and submitted to the government portfolio committee for approval; then parliament decides on the leasing of sea space
<i>Convention on Biological Diversity</i>	
Obligation to assess the ecosystem effects of fishing and to conserve its rich bio-diversity heritage	<ul style="list-style-type: none"> Scoping reports are required, if report identifies areas of concern, an EIA may be requested

In the following table, the linkages between NEMA principles and the fundamental policy principles as set out in the White Paper on A Marine Fisheries Policy for South Africa, 1997 are displayed. Policy principles for mariculture development in South Africa are in line with the NEMA principles, with a strong focus on environmental and social responsibility. The table also demonstrates the actions taken by this function to ensure compliance with those NEMA principles which have particular relevance to mariculture.

NEMA PRINCIPLES RELEVANT TO MARICULTURE	MARINE POLICY PRINCIPLES	ACTIONS TAKEN TO COMPLY WITH NEMA PRINCIPLES
<i>Sustainable development</i> Waste and pollution Use of renewable and non-renewable resource Cautious approach Negative impacts to be anticipated	Limiting entry to protect and safeguard the resource and environment is a policy imperative Precautionary principle	<ul style="list-style-type: none"> Code of Conduct for Responsible Fisheries (FAO). This is voluntary, global in scope, provides principles and standards
<i>Integration of environmental considerations into decision-making</i> Impacts to be assessed Environmental responsibility throughout lifecycle of plan or programme.		<ul style="list-style-type: none"> Develop national environmental standards that pertain specifically to land or sea based operations Socio-environmental issues need consideration; lack expertise on resource economics and socio-economics; this is not the expertise base of the mariculture section – short-term solution is to outsource
<i>Participation, empowerment and transparency</i> Participation of interested and affected parties in decision-making Community well-being and empowerment Transparent decisions Access to information Role of women and youth	Optimisation of long-term social and economic benefits to the nation Transparency and accountability in marine resource management (including all aspects of decision-making processes) Allocation of rights to utilise marine resources will be impartial	<ul style="list-style-type: none"> Applicants are requested in the application form to indicate how local communities can be empowered through the development Advertise in local municipal newspapers to holding of a public meeting to discuss proposals for a Mariculture operation; meeting is facilitated by an independent consultant and targets interested and affected parties. If requesting public sea space, this must

NEMA PRINCIPLES RELEVANT TO MARICULTURE	MARINE POLICY PRINCIPLES	ACTIONS TAKEN TO COMPLY WITH NEMA PRINCIPLES
	Local communities, labour, scientists and resource users will play an active role in the management of marine resources	appear in the Government Gazette for comment; the Environmental Scoping Report (ESR) must contain the proceedings of the public meeting and the ESR must be made available to the public for comment
<i>Environmental Justice</i> Impacts not to unfairly affect anyone Equitable access to environmental resources to meet basic needs Polluter pays principle	Access to marine resources shall be fair and equitable	<ul style="list-style-type: none"> ▪ Conditions laid down in permits can incorporate NEMA principles ▪ Regulations coupled to legislation ▪ Code for Responsible Fisheries ▪ Self-monitoring by aqua-farmers (if their water quality goes down, so does their business)
<i>Ecological Integrity</i> Minimise disturbance of ecosystems and loss of biodiversity Specific management for vulnerable ecosystems	Promotion of sustainable utilisation and the replenishment of living marine resources	<ul style="list-style-type: none"> ▪ Biodiversity Working Group at MCM assesses the introduction of alien species and translocation of alien and indigenous species (based on the Biodiversity Convention some of which are incorporated in NEMA principles)
<i>International responsibilities</i> To be discharged in the public interest		<ul style="list-style-type: none"> ▪ Codes of Conduct for Responsible Fisheries ▪ Codes on alien introduction and translocation

4.3.3 CONSTRAINTS AND LIMITATIONS WITH IMPLEMENTATION AND ENSURING COMPLIANCE

CONSTRAINTS AND LIMITATIONS	ACTIONS TO ADDRESS THESE
A major constraint to immediate and orderly expansion of the mariculture sector is the general lack of awareness among decision-makers about mariculture. Consequently, its needs are not recognised when policy decisions regarding marine and coastal resources are made	<p>Broad objectives identified to address this, include:</p> <ul style="list-style-type: none"> ▪ Provide an enabling climate for increased participation and equity in the industry ▪ Promote mariculture as an important element of integrated coastal management ▪ Establish mariculture as a supplementary source of fish and shell fish for domestic markets
The respective lead agencies, namely the Department of Agriculture and Department of Environment Affairs and Tourism need to assume full responsibility for promoting mariculture. While these Departments acknowledge their roles, they are under-resourced with respect to mariculture skills and manpower	<ul style="list-style-type: none"> ▪ Improve government support services for the mariculture industry.
Although the Marine Living Resources Act provides for a principle of national control and co-ordination,	<ul style="list-style-type: none"> ▪ Law reform process to address fragmentation

CONSTRAINTS AND LIMITATIONS	ACTIONS TO ADDRESS THESE
the effective legislation is still quite fragmented and in some cases subject to different interpretations	
The role of different government departments is also not always clearly defined. For instance, although the Dept of Agriculture has, and will continue to play, an important role in freshwater aquaculture, their involvement with marine aquaculture needs to be formalised. In addition, clear areas of jurisdiction need to be identified for MCM and provincial authorities	<ul style="list-style-type: none"> Interaction between DEAT and the Department of Agriculture has been initiated.
The process of establishing a mariculture enterprise can be a complicated one and is subject to a broad range of regulations promulgated by various Departments including DEAT, the Department of Agriculture, the Department of Health and the Department of Water Affairs and Forestry	<ul style="list-style-type: none"> Draft application procedures have been compiled in an effort to facilitate co-ordination
Some important Acts are in the process of revision that adds to the present lack of clarity regarding certain issues. In terms of the existing Animal Diseases Act, only vertebrates are referred to.	<ul style="list-style-type: none"> This shortcoming will be addressed in the new Animal Health Bill which will include invertebrates, the present basis of our mariculture industry
The Sea Shore Act is somewhat outdated.	<ul style="list-style-type: none"> There are plans to replace the Act with new legislation to give effect to policy on coastal management.
Skills and manpower in the Mariculture field are lacking in both DEAT and the Department of Agriculture. Knowledge and expertise on resource economics and socio-economics is required. This is currently not the expertise base of the Mariculture section.	<ul style="list-style-type: none"> A short-term solution is to outsource.

4.3.4 PROGRAMMES TO MANAGE ENVIRONMENTAL IMPACTS

PRIORITY PROGRAMMES 2000-2004	OUTPUTS	TIMEFRAME
Permit allocation	Improved system for permit allocation	2001
Monitoring and evaluation	Effective monitoring programmes for finfish culture, to investigate whether permit conditions are working developed	2001
	Permit conditions revised as needed	Ongoing

4.3.5 CO-OPERATIVE GOVERNANCE ARRANGEMENTS

The sea impacts of Mariculture are the responsibility of DEAT, while the land-based mariculture impacts are the responsibility of the Western Cape's provincial department of Environmental, Conservation and Sport (DECAS) and the national Department of Agriculture. Land-based mariculture is currently mostly focused in the Western Cape.

Mariculture development is very nodal and as a result its impacts are localised. As a result, the Mariculture section works locally rather than nationally. Currently, the Mariculture function works within a crisis management framework, responding to issues as they arise and making contacts with other spheres of government in this way. The newly established Mariculture Planning Committee should help to shift the focus from crisis management to longer-term integrated development of the mariculture industry in South Africa.

The Department of Agriculture has a unit for the development of mariculture growth and production. DEAT links in with this programme on a technical level. DEAT works closely with DOA on EIAs for

land-based mariculture enterprises. Environmental impacts for sea-based aquaculture are covered by DECAS.

4.4 TOURISM FUNCTION

4.4.1 POLICIES AND LEGISLATION TO MANAGE ENVIRONMENTAL IMPACTS

The White Paper: The Development and Promotion of Tourism, 1996, proposes the concept of responsible tourism as the key guiding principle for tourism development.

Responsible tourism implies a proactive approach by tourism industry partners to develop, market and manage the tourism industry in a responsible manner. It requires the promotion of balanced and sustainable tourism which minimises the impact on the environment.

Responsible tourism means responsibility of government and business to involve the local communities that are in proximity to the tourism plant and attractions through the development of meaningful economic linkages. It implies the responsibility to respect, invest in and develop local cultures and protect them from over-commercialisation and exploitation. In terms of the White Paper, a well-managed tourism industry has the potential to ameliorate, rather than contribute to, South Africa's environmental problems.

In addition, the White Paper puts forward a number of environmental objectives:

- Make the tourism industry in South Africa a leader in responsible environmental practices
- Require integrated environmental management principles for all tourism projects and all major economic development projects
- Encourage the conservation and sustainable usage of tourism resources
- Contribute to the development of a co-ordinated countrywide environmental strategy.

National Environmental Management Act, 1998: NEMA principles relevant to the Tourism function include the following:

- Under the theme *sustainable development* consideration needs to be given to waste and pollution, disturbance of landscapes, use of renewable resource, a risk aversion and cautious approach, and negative impacts to be anticipated
- *Integration of environmental considerations into decision-making* requires impacts to be assessed and environmental responsibility throughout lifecycle of plan or programme.
- *Participation, empowerment and transparency* refer to participation of interested and affected parties in decision-making, community well being and empowerment, transparent decisions, access to information, and the role of women and youth.
- *Environmental Justice* requires impacts not to unfairly affect anyone, equitable access to environmental resources to meet basic needs, applying the polluter pays principle, and placing the needs of people at the forefront of environmental management
- Minimising disturbance of ecosystems and loss of biodiversity and specific management for vulnerable ecosystems are required under the theme *ecological Integrity*
- *International responsibilities* need to be discharged in the public interest.

Environmental Impact Assessment procedures, Environmental Management Co-operative Agreements (EMCAs) and provisions relating to retrospective clean-ups to prevent environmental degradation arising during the construction and maintenance of tourism are further requirements of NEMA which are applicable to the Tourism Function.

Environmental Conservation Act, 1989: Environmental Impact Regulations require environmental assessment of any public and private resort and associated infrastructure. A resort is defined as a place frequented by people for holiday, sport, recreation, health or similar purpose.

Agenda 21 for the Travel and Tourism Sector: The World Tourism Organisation, the World Travel and Tourism Council and the Earth Council have developed Agenda 21 principles for the tourism industry. These principles include the following:

- Travel and tourism should assist people in leading healthy and productive lives in harmony with nature

- Tourism should contribute to the conservation, protection and restoration of the Earth's ecosystem
- Travel and tourism should be based on sustainable patterns of production and consumption
- In order to achieve sustainable development, environmental protection shall constitute an integral part of the tourism development process
- Tourism, peace, development and environmental protection are interdependent.

4.4.2 COMPLIANCE WITH LAWS TO MANAGE ENVIRONMENTAL IMPACTS

The Tourism function recognises that very little has been done to ensure compliance with laws to manage environmental impacts. This has largely been due to capacity gaps. Until recently, the national tourism function employed only a handful of staff as tourism was not recognised as a viable economic opportunity. In 2001, serious efforts are being made to develop the capacity of the Tourism function, which now has a personnel component of twenty-four.

LEGISLATIVE PROVISIONS	EXTENT OF COMPLIANCE
<i>National Environmental Management Act</i>	
Environmental Impact Assessment Procedures	<ul style="list-style-type: none"> ▪ Tourism developments in SDI's comply with environmental impact assessment procedures. Environmental regulations are considered on a project development basis. There is no system within the Tourism function to monitor whether all tourism developments are complying with EIA procedures. EIAs should be included as criteria in tourism development proposals
Environmental Management Co-operative Agreements (EMCAs)	<ul style="list-style-type: none"> ▪ These are currently not promoted in the tourism industry
Provisions relating to retrospective clean-ups to prevent environmental degradation arising during the construction and maintenance of tourism	<ul style="list-style-type: none"> ▪ The application of these provisions are not promoted or monitored by the Tourism function. They should be included as an element of development criteria in tourism development proposals
<i>Environmental Conservation Act</i>	
Environmental Impact Regulations	<ul style="list-style-type: none"> • See Environmental Impact Assessment procedures above

In the following table, the linkages between NEMA principles and the fundamental policy principles as set out in the White Paper: The Development and Promotion of Tourism, 1996 are displayed. Policy principles for tourism development in South Africa are clearly in line with the NEMA principles, with a strong focus on environmental and social responsibility. As mentioned above, the Tourism function has not had a strong focus on ensuring compliance with environmental regulations and as a result it is difficult to determine at this stage the extent to which there has been compliance with those NEMA principles which have particular relevance to Tourism. This is acknowledged by the Tourism function as a big gap and actions to ensure compliance in the future are provided.

NEMA PRINCIPLES RELEVANT TO TOURISM	TOURISM WHITE PAPER PRINCIPLES	ACTIONS TO ENSURE COMPLIANCE
<i>Sustainable development</i>	Avoid waste and over-consumption	<ul style="list-style-type: none"> ▪ Include responsibility and sustainability concepts as criteria in tourism project development proposals ▪ Evaluate and monitor tourism projects in terms of "responsible" and "sustainability" concepts.
Waste and pollution		
Disturbance of landscapes	Use local resources sustainably	
Use of renewable resource	Market tourism that is responsible, respecting local, natural and cultural environments	
Risk aversion and cautious approach	Tourism development will be underpinned by sustainable environmental practices	
Negative impacts to be anticipated		

NEMA PRINCIPLES RELEVANT TO TOURISM	TOURISM WHITE PAPER PRINCIPLES	ACTIONS TO ENSURE COMPLIANCE
<p>Integration of environmental considerations into decision-making</p> <p>Impacts to be assessed</p> <p>Environmental responsibility throughout lifecycle of plan or programme.</p>	<p>Assess environmental, social and economic impacts as a prerequisite to developing tourism</p> <p>Conduct Integrated Environmental Management procedures for all new tourism projects</p>	<ul style="list-style-type: none"> ▪ Promote integration of business development considerations, i.e. economic, technical, social, institutional and financial facets, and environmental considerations into decision-making process. ▪ Promote integration of environmental considerations into project cycle
<p><i>Participation, empowerment and transparency</i></p> <p>Participation of interested and affected parties in decision-making</p> <p>Community well-being and empowerment</p> <p>Transparent decisions</p> <p>Access to information</p> <p>Role of women and youth</p>	<p>Involve the local community in planning and decision-making</p> <p>Ensure communities are involved in and benefit from tourism</p> <p>Effective community involvement will form the basis of tourism growth</p> <p>Tourism will be used as a development tool for the empowerment of previously neglected communities and should particularly focus on the empowerment of women</p>	<ul style="list-style-type: none"> ▪ Ensure appropriate project development proposals and tender conditions. ▪ Facilitate appointment of project steering committees and project teams to ensure participation, empowerment and transparency. ▪ Promote appropriate evaluation and monitoring programmes
<p><i>Environmental Justice</i></p> <p>Impacts not to unfairly affect anyone</p> <p>Equitable access to environmental resources to meet basic needs</p> <p>Polluter pays principle</p> <p>Needs of people to be at the forefront of environmental management</p>	<p>Monitor impacts of tourism and ensure open disclosure of information</p>	<ul style="list-style-type: none"> ▪ Prepare guidelines for responsible/ sustainable tourism development. ▪ Undertake viability studies including sensitivity analysis.
<p><i>Ecological Integrity</i></p> <p>Minimise disturbance of ecosystems and loss of biodiversity</p> <p>Specific management for vulnerable ecosystems</p>	<p>Maintain and encourage natural, economic, social and cultural diversity</p> <p>Support mandatory environmental management practices in ecologically sensitive areas</p>	<ul style="list-style-type: none"> ▪ Promote sustainable utilisation of natural resources in terms of appropriate business and work plans. ▪ Use ecotourism as vehicle to maintain and promote ecological integrity. ▪ Support eco-friendly concepts such as the "Blue Flag"
<p><i>International responsibilities</i></p> <p>To be discharged in the public interest</p>		<ul style="list-style-type: none"> ▪ Develop national and global guidelines for sustainable tourism development

4.4.3 CONSTRAINTS AND LIMITATIONS WITH RESPECT TO ACHIEVING COMPLIANCE

As mentioned in the previous section, capacity gaps are central to the inability of the Tourism function to achieve compliance with environmental regulations and NEMA principles. Additional constraints are provided in the following table:

CONSTRAINTS AND LIMITATIONS	ACTIONS TO ADDRESS CONSTRAINTS
The Tourism function does not have statutory authorisations to manage and regulate the impacts of tourism development by the tourism industry	<ul style="list-style-type: none"> ▪ Tourism specific issues will be taken up in the law reform programme. Existing tourism legislation will be reviewed and integrated tourism development legislation drafted to give effect to the policy objectives of the Tourism White Paper including the concept of responsible and sustainable tourism.
Guidelines for Sustainable Tourism Development are lacking. There is a need to establish clear procedures and guidelines for planned and sustainable Travel and Tourism expansion, paying particular attention to ecotourism. Ensuring that strategies take into account the need for local community development, engagement and empowerment. Ultimately, the key to long-term sustainability of the tourism industry is the development of consensus by all stakeholders on a long-term vision and availability of a strategy for implementation of guidelines for sustainable tourism development	<ul style="list-style-type: none"> ▪ A draft discussion document is available. ▪ Draft to be consulted with tourism fraternity in preparation for the Commission on Sustainable Development (CSD) Convention of the Parties OP in 2002
While policy principles are clearly in line with notions of environmental sustainability, implementation has been weak due to resource and capacity constraints	<ul style="list-style-type: none"> ▪ Appropriate resources and capacities will be identified, established and mobilised.
South Africa has not adopted the principles of Agenda 21 for the Travel and Tourism Industry developed by the World Travel and Tourism Council (WTTC), the World Tourism Organisation (WTO) and the Earth Council. The following priority areas for environmental action are proposed: <ul style="list-style-type: none"> ▪ Assessing the capacity of the existing regulatory, economic and voluntary framework to bring about sustainable tourism ▪ Training, education and public awareness on sustainable tourism ▪ Formulation and approval of appropriate indicators and guidelines for sustainable tourism development to guide implementation of new development proposals and amendment of existing business plans ▪ Measuring progress in achieving sustainable development 	<ul style="list-style-type: none"> ▪ Development of a strategy for the implementation of indicators and guidelines for sustainable tourism development.
Limited information on the tourism impacts on the environment to inform and guide planning and tourism development	<ul style="list-style-type: none"> ▪ The University of Pretoria is currently undertaking research, including an economic modelling exercise, on the impact of tourism on natural resources. DEAT has established a good working relationship with the University and will consider the results of the research in future tourism research and development programmes

4.4.4 PROGRAMMES TO MANAGE ENVIRONMENTAL IMPACTS

PRIORITY PROGRAMMES	OUTPUTS 2001 – 2004
Implement the White Paper on The Development and Promotion of Tourism	<p>Develop guidelines and indicators for responsible/ sustainable tourism development which promote the integration of business development considerations with environmental considerations</p> <p>Develop a strategy for the implementation of guidelines and indicators for sustainable tourism development</p> <p>Undertake viability studies for tourism development projects in line with environmental management legislative requirements</p> <p>Evaluate and monitor tourism development strategies and projects in terms of "responsible tourism " and "sustainability" concepts</p> <p>Review existing tourism legislation and draft integrated tourism development legislation to give effect to the objectives of the White Paper, including the concept of responsible and sustainable tourism.</p>

4.4.5 CO-OPERATIVE GOVERNANCE PROGRAMMES

Strong unifying leadership is required in order to co-ordinate sustainable tourism development in South Africa. It is broadly accepted that only DEAT at a national and provincial level can play this role. DEAT therefore is the designated "champion" and catalyst for delivery. It must act as a conduit bringing together all relevant and interested parties. This feeds directly into the collaborative strategy ("the tourism cluster process") currently being undertaken by DEAT.

Currently, liaison with the environmental component of DEAT takes place on a project basis. Tourism Top Management participate in the Management meetings of DEAT where cross-pollination of tourism/environment issues takes place.

There is no formal structure for the Tourism function to co-operatively manage the environmental impacts of tourism at a national, provincial and local government level. The Unblocking Strategy currently being developed by the Tourism function seeks to build co-operation between different sectors and spheres of government for tourism development within the context of the Tourism Infrastructure Investment Framework. It is intended that co-operative arrangements needed for sustainable tourism development and compliance with environmental regulations as well as NEMA principles be identified and implemented through this strategy.

CHAPTER FIVE: PROPOSALS FOR INTEGRATED ENVIRONMENTAL MANAGEMENT (IEM)

5.1 INTRODUCTION

Integrated Environmental Management (IEM) is a tool used to assess the environmental impacts of development. IEM is designed to ensure that the environmental consequences of development proposals are adequately considered in the planning process so as to be able to mitigate any negative impacts and to enhance any positive aspects of development proposals.

5.2 DEAT SPECIFIC IEM PROPOSALS

DEAT specific IEM proposals relate specifically to the review and redrafting of Chapter 5 of NEMA and new EIA regulations. This review is currently underway. Consultations have been held with most provincial environmental departments. Further consultations will be undertaken with national departments such as DLA, DWAF, DME and DOA as well as key stakeholders. Through the initial consultation process, pertinent issues were raised for consideration. These issues are reflected here and will be taken forward in the next consultation phase.

Amendment Of Chapter 5

- The scope of Chapter 5 must be widened and provision made for a range of environmental management tools
- The Chapter to provide for the delegation of functional responsibility for environmental management to the lowest competent level of government, whilst retaining final responsibility at the provincial level, in certain circumstances where capacity is limited.

New EIA Regulations In Terms Of Section 24 Of NEMA

- Framework regulations prescribing minimum national standards which may be adapted or extended by provinces or other departments need to be developed
- The new regulations should ideally regulate the impact of activities rather than the activities themselves
- Provision should be made for the identification of sensitive environments in which EIAs (or other environmental management tools) will become automatically required
- Existing regulations do not adequately provide for a screening mechanism to decide which activities should be subjected to EIAs. A clear process for the screening of applications must be created in new regulations and the role of scoping must be clarified
- There is inconsistency in the process and requirements for exemptions from the EIA regulations between the provinces. The new regulations must therefore contain minimum requirements for exemptions and standardise the process to be followed
- At present the EIA regulations only apply to the construction or upgrading of identified activities. It has been suggested that provision should be made for existing activities and the decommissioning of activities that have the potential to cause environmental harm to be made subject to the new EIA regulations
- There is widespread consensus that the procedure for appeals provided for in the 1997 regulations is inadequate. A consistent and coherent structure for the appeal process must be contained in the new legislation
- The 1997 regulations are widely criticised for failing to provide for post decision monitoring and implementation. It has been suggested that new regulations should list activities or impacts which require Environmental Management Plans (EMP) and Environmental Implementation Plans (EIP) in addition to the EIA. Compliance with the EIP/EMP should then be made part of the authorisation
- The new regulations must address the gap that presently exists in the ECA regarding the enforcement of the regulations and specifically penalties for non-compliance
- There is broad support for the notion of requiring proponents to pay fees for the consideration of applications thereby making provision for cost recovery of the EIA process by government
- In their EIMP, DLA makes recommendations for the revision of EIA regulations. These proposals are under consideration. In addition, the two departments are discussing opportunities for the alignment of land-use planning procedures with environmental impact procedures.

CHAPTER SIX: PERFORMANCE MONITORING

6.1 SYSTEM FOR MONITORING THE IMPLEMENTATION OF THE DEAT EIMP

The Executive Summary provides an overview of outputs and time frames for the implementation of DEAT's EIMP. Detailed outputs and timeframes are provided in the separate EMP and EIP chapters. These outputs and timeframes will be used as the basis for monitoring and reporting.

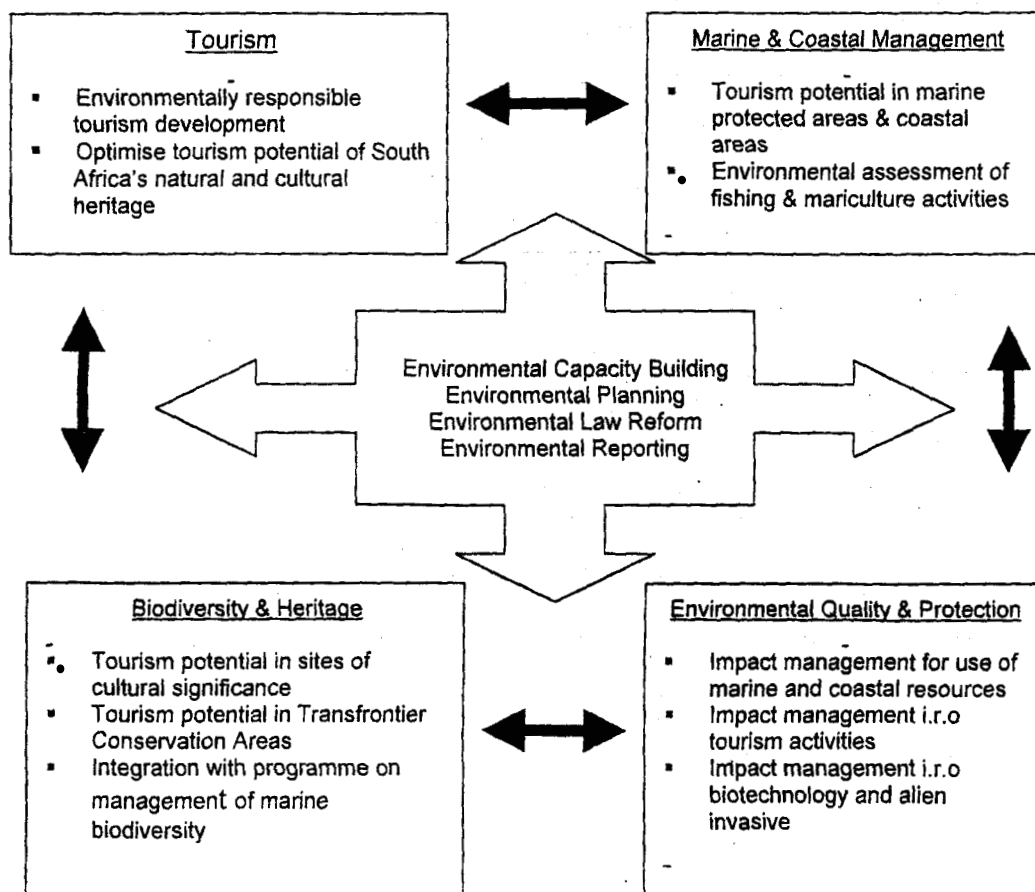
6.1.1 INTERNAL ARRANGEMENTS FOR CO-ORDINATION AND INTEGRATION

Integration between the core functions of the Department is achieved through:

- Regular meetings of senior management
- Strategic planning sessions
- The establishment of key focus areas that cut across core functions

These forums for interaction provide the means through which the implementation of DEAT's EIMP will be communicated, co-ordinated and integrated.

Points of integration across the core functions are shown below.



6.1.2 DEAT'S PERFORMANCE MONITORING SYSTEM

The DEAT EIMP is directly connected with the Departmental business plan for 2001/02 and the Medium Term Strategic Framework for 2001 – 2004. The EIMP outputs and timeframes (targets) are reflected in both these planning documents and are reflected in the budget.

The EIMP will be monitored and reported on through the following mechanisms:

Quarterly performance reporting to the Minister and Director-General. This reporting system is already in place

Annual reporting on the EIMP, which will reflect:

- Progress with targets set
- Progress with co-operative governance objectives, and
- Alignment with the MTSF which takes place in approximately November. Annual reporting on EIMPs will take place around March and should then reflect any changes in the MTSF.

6.2 PLAN FOR MONITORING COMPLIANCE OF ALL SCHEDULED DEPARTMENTS EIP/EMP

In terms of the National Environmental Management Act No. 107 of 1998, section 16, DEAT is required to monitor compliance by national departments and provinces to their EIPs or EMPS. These organs of state are required to report annually to the DG of DEAT and the CEC within 4 months of the end of its financial year on the implementation of its adopted EIP or EMP

In addition, each provincial government must ensure that each municipality within its province complies with the relevant provincial EIP. Municipalities must adhere to the relevant provincial EIPs and EMPS and the principles contained in section 2 in the preparation of any policy, programme or plan, including the establishment of integrated development plans and land development objectives

In order to fulfill its statutory obligations in terms of monitoring and reporting, DEAT intends:

- Designing a process for monitoring compliance with EIPs and EMPS
- Preparing guidelines for scheduled departments on annual reporting
- Designing a process for ensuring that municipalities comply with provincial EIPs and EMPS.

Design a process for monitoring compliance with EIPs and EMPS

- Departments are required to report to DEAT on compliance within 4 months of the end of their financial year. Report will therefore be due by the end of July 2002
- A schedule for reporting needs to be devised. Annual reports should be presented to the EIP/EMP Sub-committee and CEC on a staggered basis.
- DEAT to explore whether the numerous reporting requirements, including annual reporting for Agenda 21 can be aligned
- Annual re-alignment workshops to be held with scheduled departments to integrate reporting information, identify gaps and constraints in implementation and strengthen co-operative governance arrangements.

Prepare guidelines for scheduled departments on annual reporting.

- The guidelines need to provide a user-friendly format for departments and provinces for reporting
- Electronic templates should be provided as well as specific information requirements for each department and province
- Existing EIPs and EMPS need to be reviewed to determine whether they provide the baseline information for performance monitoring as specified in the guidelines. Where this information is lacking, DEAT needs to identify gaps with individual departments and reach agreement on what exactly is to be reported on.
- DEAT to pilot the reporting guidelines within the department and revise accordingly.

Design a process for ensuring that municipalities comply with provincial EIPs and EMPS

Through the EIP/EMP process, national and provincial departments have identified critical information gaps in terms of understanding the linkages between local government, provincial and national governments and environmental management, specifically:

- Ensuring that municipalities comply with provincial EIPs and EMPS
- Mechanisms for co-operation on the implementation of national sectoral EIPs/EMPS at local government level
- Integration of environmental considerations arising from national EIPs/EMPS, provincial EIPs, Local Development Objectives (LDO's) and Integrated Development Plans (IDP's) with Local Agenda 21's

An exercise will be undertaken by DEAT to clarify these information gaps and will inform the setting up of a system to ensure that municipalities comply with provincial EIPs and EMPs.

6.3 ENVIRONMENTAL INDICATORS

During the development of the first National State of the Environment Report, 1999 (SOE), it was noted that there were several gaps in accurate, spatially complete and long-term data environmental data. Environmental management decisions are restricted by these information gaps.

DEAT has therefore recently initiated a project to develop a set of indicators and a system for monitoring and reporting, which will assist in the management of natural resources by enhancing existing tools for decision making, such as the state of the environment reports. To ensure that the process is open and comprehensive, and that the products are relevant and useful, the Department intends consulting with parties from a wide range of environmental management spheres.

The goal of this project (Environmental Indicators Initiative) is to develop a core set of environmental indicators for South Africa by the end of 2001. The purpose of these environmental indicators is to:

- Provide a representative picture of environmental conditions, pressures on the environment, and society's responses, summarising environmental trends at national, provincial and local levels
- Help integrate environmental information management across resource issues, administrative, policy and scientific boundaries, and provide a basis for international comparisons
- Be aggregate-able from local to national level and compatible with regional and global indicators, to the extent possible
- Be responsive to changes in the environment related to human activities, thus promoting more informed decision-making.

The indicators will monitor the following:

- Trends in environmental conditions
- The pressures on the environment and causes of environmental change, and
- The effectiveness of existing and proposed mechanisms for environmental management

The indicators will therefore be representative of the current environmental issues in South Africa. As a starting point, the themes of the National State of the Environment report (Climate & Atmosphere, Terrestrial Systems & Resources, Freshwater Systems, Marine & Coastal Resources, The Social Environment, The Economic Environment, and the Political/Institutional Environment) will be used, and issues selected within these.

In addition, the framework for reporting on indicators will be flexible enough to allow continuity between the different levels of SOE Reporting (i.e. from local through to global). The indicators will have to be selected according to criteria established in collaboration with various stakeholders, including environmental managers, to ensure that the information presented is of practical management value.

It is also recognised that the monitoring and presentation of indicator data needs to be sustained in the long term. For this reason DEAT requires a strategy for indicator implementation, which will be cost effective and independent of international donor assistance. Innovative means of data collection, co-ordination and updating, will be proposed to meet these needs. It is intended that the indicators provided by scheduled departments in the EIP/EMPs will inform the development of environmental indicators, where applicable.

Environmental indicators may be used to strengthen DEAT's role in ensuring co-operative environmental management. The indicators selected will therefore have to be meaningful to managers and policy makers in other fields (such as transport, energy affairs, finance, agriculture, water affairs and forestry), as well as to managers and policy makers in the environmental field.

The Department of Environmental Affairs & Tourism also has certain international reporting obligations, in terms of international conventions and progress towards sustainable development as set out in Agenda 21. The core set of environmental indicators must therefore be selected so as to assist DEAT in meeting these obligations in the most scientifically credible manner.

6.4 ANNUAL NATIONAL REPORT ON SUSTAINABLE DEVELOPMENT FOR THE UNITED NATIONS COMMISSION ON SUSTAINABLE DEVELOPMENT

DEAT, as the lead agent for the environment in South Africa, is responsible for providing the United Nations Commission for Sustainable Development (CSD) with an annual report on progress made with implementing Agenda 21 (Annual Report on Sustainable Development). Annual reports have been submitted by DEAT, as required, to the UN-CSD since 1996.