

**A Legal Framework for Integrated Environmental Governance in  
South Africa and the North-West Province**

by

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**Dedicated to my parents, Mart and Phillip Kotzé**

## ABSTRACT

The environmental governance sphere in South Africa is fragmented. This fragmentation is exacerbated in the provinces. Fragmentation manifests in various ways, including, *inter alia*, structural fragmentation between the various spheres and line functions of government, fragmented environmental legislation which is silo-based and issue-specific, jurisdictional overlaps, and duplication of procedures and processes. Fragmentation poses several disadvantages and may ultimately hamper effective and sustainable service-delivery by government. The problem of fragmentation forms the crux of this study. The principal objective of this thesis is accordingly to investigate possible solutions to address fragmentation and to propose a more sustainable strategy to achieve integration of currently fragmented environmental governance efforts in South Africa and the North-West Province (NWP). The NWP has specifically been chosen as a case study in this regard since problems of fragmentation are exacerbated in the provinces.

The first step in this thesis is to analyse the theoretical concept of sustainability in order to establish the eventual objective of what integrated environmental governance efforts should achieve. The concept of fragmented governance and possible generic reasons for fragmentation, including unco-operative and unsustainable organisational behaviour, are also investigated to highlight the nature and disadvantages of fragmentation and other factors that may contribute to it. A further component of the theoretical analysis includes an investigation of the concepts of integrated, or holistic governance, and an investigation of the concepts integrated environmental management (IEM), co-operative environmental governance (CEG), and integrated pollution prevention and control (IPPC). These concepts are investigated in order to ascertain the possible solutions for integration that they may pose.

Secondly, this thesis investigates the current state of the fragmented environmental governance regime in South Africa and the NWP. The extent and reasons for fragmentation are discussed; and unco-operative organisational behaviour patterns in the national, provincial and local spheres of government are investigated. The concepts of IEM, CEG and IPPC, as they are established in South African law, are also discussed.

Thirdly, this study investigates integrated approaches to environmental governance in the international sphere by way of a comparative study. For this purpose, the relevant provisions of the European *Integrated Pollution Prevention and Control Directive*, 1996 are discussed. The comparative study is concluded with an investigation of the provisions of the Directive as they are applied in national legal frameworks in the EU, with specific reference to Finland and the Netherlands. The main objective of this part of the study is to ascertain whether established solutions for integration of governance efforts are available in practice, and if so, to what extent they are employed to address fragmentation.

This study concludes with recommendations on how the fragmented environmental governance sphere in South Africa may be integrated. These include short-, medium- and long-term scenarios, namely: a less radical strategy which must aim to optimise the current environmental governance regime by employing established concepts such as IEM, CEG and IPPC; a more radical strategy, which aims to establish a single act to regulate all procedural aspects relating to environmental governance and authorisations, and a single authority that is responsible for all procedural aspects in terms of the act; and an extremely radical strategy, which aims to establish a one-stop environmental governance shop, with a single act regulating all procedural and substantive aspects, and a single lead agent responsible for regulation in terms of this act.

### **KEY WORDS**

Environmental governance, Fragmentation, Integration, Sustainability, Organisational behaviour, Co-operative environmental governance, Integrated environmental management, Integrated pollution prevention and control, Optimisation, One-stop shop



## **OPSOMMING:**

### **‘n Regsraamwerk vir Geïntegreerde Omgewingsregering in Suid-Afrika en die Noordwes Provinsie**

Die Suid-Afrikaanse raamwerk vir omgewingsregering is gefragmenteer. Hierdie fragmentasie word gerepliseer en selfs vererger in die onderskeie provinsies. Fragmentasie manifesteer op verskillende wyses. Dit sluit onder andere in: fragmentasie van omgewingswetgewing, strukturele fragmentasie in terme van die verskeie regeringsfere en regeringsdepartemente verantwoordelik vir omgewingsregering, duplisering van verskeie prosesse in terme van gefragmenteerde wetgewing, en jurisdiksionele fragmentasie in terme van geografiese gebiede en die onderskeie mandate vir omgewingsbeheer. Daar is verskeie nadele verbonde aan fragmentasie, byvoorbeeld, dat fragmentasie tot onvolhoubare dienslewering deur die regering mag lei. Die probleem van fragmentasie vorm dus die fokuspunt van hierdie studie. Die primêre doel van die proefskrif is gevolglik om moontlike oplossings vir die probleem van fragmentasie in Suid-Afrika en die Noordwes Provinsie te bestudeer om volhoubare oplossings voor te stel ten einde die probleem aan te spreek. Die Noordwes Provinsie is spesifiek gekies as ‘n gevallestudie in hierdie opsig omrede fragmentasie vererger word in die provinsies.

Ten einde bogenoemde doel te bereik, word die konsep van volhoubaarheid eerstens ondersoek. Hierdie ondersoek het verder ten doel om vas te stel wat die hoofdoel van hervorming van die gefragmenteerde omgewingsregeringraamwerk behoort te wees, naamlik die bereiking van volhoubare dienslewering deur omgewingsdepartemente. Die teoretiese gedeelte van hierdie studie ondersoek verder die konsepte van geïntegreerde omgewingsbestuur, samewerkende omgewingsregering, en geïntegreerde besoedelingsvoorkoming en beheer. Hierdie konsepte word spesifiek ondersoek ten einde moontlike oplossings vir integrasie voor te stel.

Die studie behels tweedens ‘n ondersoek na die gefragmenteerde omgewingsregeringraamwerk in Suid-Afrika en die Noordwes Provinsie. Die aard en redes vir fragmentasie, asook onvolhoubare administratiewe en regeringsbestuurspraktyke in omgewingsdepartemente word vir hierdie doel

bestudeer. Die konsepte van geïntegreerde omgewingsbestuur, samewerkende omgewingsregering, en geïntegreerde besoedelingsvoorkoming en beheer, soos wat dit tans gevestig is in Suid-Afrika en die Noordwes Provinsie, word verder ondersoek.

Hierdie studie behels derdens 'n regsvergelykende ondersoek na internasionale praktyke ten einde voorstelle te formuleer wat moontlik oplossings mag bied vir fragmentasie op plaaslike vlak. Die voorskrifte van die Europese *Integrated Pollution Prevention and Control Directive*, 1996, en die Finse en Nederlandse benaderings tot geïntegreerde omgewingsregering, word vir hierdie doel bestudeer. Die primêre doel van die regsvergelykende studie is om te bepaal of daar gevestigde internasionale benaderings bestaan wat fragmentasie aanspreek, en indien wel, om verder vas te stel tot watter mate hierdie benaderings op plaaslike vlak aangewend kan word.

Die studie sluit af met aanbevelings vir moontlike strategieë wat aangewend mag word om die gefragmenteerde omgewingsregeringraamwerk in Suid-Afrika en die Noordwes Provinsie te integreer. Hierdie aanbevelings sluit kort, medium en langtermyn scenarios in, naamlik: 'n minder ingrypende strategie wat ten doel het om die bestaande omgewingsregeringraamwerk te optimaliseer deur gebruik te maak van bestaande konsepte soos geïntegreerde omgewingsbestuur, samewerkende omgewingsregering en geïntegreerde besoedelingsvoorkoming en beheer; 'n meer radikale strategie wat ten doel het om 'n enkele wet te skep wat alle prosedurele aspekte reguleer in terme van omgewingsregering en permitte, en die gepaardgaande daarstelling van 'n enkele regeringsorgaan wat verantwoordelik is vir alle prosedurele aspekte in terme van die wet; en die mees radikale strategie, of die sogenaamde 'een-stop sentrum', wat ten doel het om 'n enkele wet te skep wat alle prosedurele en substantiewe aspekte van omgewingsregering aanspreek, en die gepaardgaande daarstelling van 'n enkele staatsorgaan wat verantwoordelik is vir die regulering van alle substantiewe en prosedurele aspekte in terme van omgewingsregering.

## **TREFWOORDE**

Omgewingsregering, Fragmentasie, Integrasie, Volhoubaarheid, Organisatoriese gedrag, Samewerkende omgewingsregering, Geïntegreerde omgewingsbestuur, Geïntegreerde besoedelingsvoorkoming en beheer, Optimalisering, Een-stop sentrum

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## LIST OF ABBREVIATIONS

ALARA	As low as reasonably achievable
APA	Air Pollution Act of 1970
APPA	Atmospheric Pollution Prevention Act 45 of 1965
BAT	Best available techniques
BATNEEC	Best available technique not entailing excessive costs
BPEO	Best Practicable Environmental Option
BREF	BAT-reference documents
CEC	Committee for Environmental Coordination
CEG	Co-operative environmental governance
CMA	Catchment management agency
CWA	Chemical Waste Act of 1976
DACE	Department of Agriculture, Conservation and Environment
DDLGH	Department of Development, Local Government and Housing
DEAT	Department of Environmental Affairs and Tourism
DIF	District inter-governmental forum
DME	Department of Minerals and Energy
DWAF	Department of Water Affairs and Forestry
EC	European Commission
EHWA	Environmental Hazardous Waste Act of 1985
EIA	Environmental impact assessment
EIA Guidelines	Environmental impact assessment Guidelines
EIP	Environmental implementation plan
EIPPCB	European Integrated Pollution Prevention and Control Bureau
EL Decree	Establishments and Licences Decree
EMA	Environmental Management Act, 1993
EMAA	Environmental Management Act Authorisation
EMCA	Environmental management co-operation agreement
EMP	Environmental management plan
EPA	Environmental Protection Act 86 of 2000
EPA Decree	Environmental Protection Act Decree 169 of 2000
EPPA	Environment Permit Procedure Act 735 of 1991
EU	European Union

FEAP	Fifth Environmental Action Programme
GALA	General Administrative Law Act of 1994
GMO	Genetically modified organism
GPEHA	General Provisions on Environmental Health Act of 1979
HIA	Heritage impact assessment
IEM	Integrated environmental management
IEEP	Institute for European Environmental Policy
IDP	Integrated development plan
IPC	Integrated pollution control
IPPC	Integrated pollution prevention and control
IPPC Directive	Integrated Pollution Prevention and Control Directive, 1996
IPWM	Integrated pollution and waste management
IRFA	Inter-Governmental Relations Framework Act 13 of 2005
LGMSA	Local Government: Municipal Systems Act 32 of 2000
MA	Mines Act of 1903
MAF	Ministry of Agriculture and Fisheries
MEA	Ministry of Economic Affairs
MHSPE	Ministry of Housing, Spatial Planning and the Environment
MOU	Memorandum of understanding
MTW	Ministry of Transport and Waterways
MPRDA	Mineral and Petroleum Resources Development Act 28 of 2002
NEAF	National Environmental Advisory Forum
NEMA	National Environmental Management Act 107 of 1998
NEMAQA	National Environmental Management: Air Quality Act 39 of 2004
NEMBA	National Environmental Management: Biodiversity Act 10 of 2004
NHRA	National Heritage Resources Act 25 of 1999
NIF	National inter-governmental forum
NNA	Noise Nuisance Act of 1979
NNRA	National Nuclear Regulator Act 47 of 1999
NWA	National Water Act 36 of 1998
NWP	North-West Province
NWRS	National Water Resource Strategy

OECD	Organisation for Economic Co-operation and Development
PCC	President's Co-ordinating Council
PDCA	Plan-do-check-act
PIF	Provincial inter-governmental forum
ROD	Record of decision
SAHRA	South African Heritage Resources Agency
SoER	State of the Environment Report
SPA	Soil Protection Act of 1986
SWPA	Surface Water Pollution Act of 1969
SYKE	Finnish Environment Institute
TBVC	Transkei, Bophuthatswana, Venda, Ciskei
UK	United Kingdom
VAHTI	Monitoring and Environment Loading Data System
WA	Water Act 264 of 1961
White Paper	White Paper on Integrated Pollution and Waste Management for South Africa: A Policy on Pollution Prevention, Waste Minimisation, Impact Control and Remediation, 2000
WPA	Waste Products Act of 1977
WSA	Water Services Act 108 of 1997

# **1. INTRODUCTION**

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## Chapter 1: Introduction

### 1.1 Motivation

Recent years have seen a remarkable development of environmental law in South Africa.<sup>1</sup> National government, to its credit, enacted wide-ranging legislation, that essentially aims to place the provisions of section 24 of the *Constitution of the Republic of South Africa*, 1996 (hereafter the 1996 Constitution) on statutory footing.<sup>2</sup> Section 24 contains, amongst other provisions, directive principles which impose duties on government to protect the environment<sup>3</sup> for present and future generations through reasonable legislative and other measures.<sup>4</sup> It is apparent from a mere literal interpretation of section 24, that these legislative measures should advance sustainable development, or sustainability.<sup>5</sup> Questions that arise in this regard include: what does

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<sup>1</sup> Glazewski *Environmental Law* 3, Glazewski *Environmental Law in South Africa* 5, and Centre for Environmental Management *Report on an Environmental Management System for the North-West Province* 33. For a discussion on the pre-1994 environmental law regime, as well as the rise of environmental concern in South Africa, see Van Meurs *Private Recourse for Environmental Harm* 103-106, and Rabie and Fuggle *The Rise of Environmental Concern* 11-25.

<sup>2</sup> This legislation includes, *inter alia*, the *National Environmental Management Act* 107 of 1998, the *National Water Act* 36 of 1998, the *Water Services Act* 108 of 1997, the *Marine Living Resources Act* 18 of 1998, the *National Forests Act* 84 of 1998, the *National Heritage Resources Act* 25 of 1999, the *National Nuclear Energy Regulator Act* 47 of 1999, the *National Veld and Forest Fire Act* 101 of 1998, the *Nuclear Energy Act* 46 of 1999, the *National Environmental Management: Biodiversity Act* 10 of 2004, the *National Environmental Management: Protected Areas Act* 57 of 2003, the *Mineral and Petroleum Resources Development Act* 28 of 2002, the *Genetically Modified Organisms Act* 15 of 1997, and the *National Environmental Management: Air Quality Act* 39 of 2004.

<sup>3</sup> 'Environment' is defined in section 1 of the NEMA as:

...the surroundings within which humans exist and that are made up of-

- (i) the land, water and atmosphere of the earth;
- (ii) micro-organisms, plant and animal life;
- (iii) any part or combination of (i) and (ii) and the interrelationships among and between them; and the physical, chemical, aesthetic and cultural properties and conditions of the foregoing that influence human health and well-being.

<sup>4</sup> Section 24 states that:

Everyone has the right:

- (a) to an environment that is not harmful to their health or well-being; and
- (b) to have the environment protected, for the benefit of present and future generations, through reasonable legislative and other measures that:
  - (i) prevent pollution and ecological degradation;
  - (ii) promote conservation; and
  - (iii) secure ecologically sustainable development and use of natural resources while promoting justifiable economic and social development.

Section 24 reflects characteristics of both a classical fundamental human right and a socio-economic right. The first generational character of the right is embodied in section 24(a) whilst the socio-economic character of the right is found in section 24(b). For a detailed analysis of the section 24 environmental right, see Glazewski *Environment* 409-427.

<sup>5</sup> See paragraph 2.2 below for a discussion on sustainability and sustainable development.



sustainability entail, and is the current domestic environmental law regime conducive for sustainability in South Africa?

Despite these developments, the South African environmental governance sphere is fragmented.<sup>6</sup> Fragmentation includes unaligned environmental governance processes, structures, policies and procedures; vertical fragmentation between the different spheres of government, and horizontal fragmentation between the different line functionaries in each sphere;<sup>7</sup> as well as lack of co-operative governance and an integrated approach to environmental management.<sup>8</sup> Fragmentation is furthermore exacerbated by unsustainable and unco-operative organisational behaviour patterns inherent in the ranks of government.<sup>9</sup> This fragmentation may impede the achievement of sustainability.

Fragmentation poses several disadvantages. Fragmented governance structures may result in disjointed and incremental governance processes that are inefficient and unsustainable, with significant duplication and overlap of both governance mandates and adoption and use of governance tools. Such fragmentation can be found at both policy and operational level of government.<sup>10</sup> Whilst fragmentation at policy level is evident from fragmented legislation and governance structures, fragmentation at operational level presents itself in terms of the fragmented use of governance tools, including environmental authorisations. Environmental authorisations are, to date, still the policy instrument of choice for most executive line functioning organs of state at national, provincial and local spheres of government.<sup>11</sup> Consequently, the

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<sup>6</sup> Bray 1995 *SA Public Law* 173-174.

<sup>7</sup> Line functionaries include for the purpose of this study all government departments in the national, provincial and local spheres of government that directly, or indirectly, execute governance tasks relating to the environment. These may, for example, include the Department of Environmental Affairs and Tourism, the Department of Water Affairs and Forestry, the Department of Minerals and Energy and the South African Heritage Resource Agency.

<sup>8</sup> See paragraph 3.2 below for a discussion on fragmentation in the South African environmental governance sphere.

<sup>9</sup> See paragraph 3.3 below.

<sup>10</sup> See paragraphs 2.3 and 3.3 below.

<sup>11</sup> Environmental authorisations are accordingly selected and used as an indicator policy instrument at the executive level. It is further observed in this regard that public, or administrative regulation, is largely implemented by authorisation requirements, which have as a primary aim to avoid certain negative consequences of, *inter alia*, certain externalities, such as activities which may cause environmental pollution. See further Von Wangenheim *Public Administration* 1, 5-7.

environmental authorisation is an important component in the execution of environmental governance tasks. For the purpose of this study, environmental authorisations include: official environmental-related permits, registrations, licences, certificates, permissions, and exemptions that an investor or developer requires prior to commencing an activity that may have a detrimental effect on the environment. 'Authorisation' is defined for the purpose of this study as:

A written order, document or certificate that may be issued by a competent authority (government department, minister, authorised official) to an applicant to grant the applicant permission to perform certain acts or activities that may have an impact on the environment.<sup>12</sup>

The current fragmented and disjointed arrangements for environmental authorisations clearly illustrate the divisions amongst autonomous line functions of, and amongst, all three spheres of government and line functionaries in each sphere; as well as the fragmented nature of issue-specific and silo-based environmental legislation, processes and procedures in South Africa.<sup>13</sup> Although this study is principally concerned with the integration of environmental governance efforts in general, specific emphasis is placed on the environmental authorisation as a governance, or regulatory instrument in the entire environmental governance effort.

National problems arising from fragmentation are exacerbated in the provinces. The North-West Province (hereafter the NWP) serves as an example for the purpose of this study.<sup>14</sup> The NWP is the sixth largest province in South Africa and is characterised by a complex human-environmental interface. The state of the environment in the NWP reflects the prevailing environmental situation in South Africa. Key problems include, *inter alia*, water pollution, land degradation, mining pollution, air pollution and loss of bio-diversity.<sup>15</sup> In addition, the NWP is struggling with a number of environmental, administrative, institutional and legislative related challenges, which are arguably responsible for creating fragmentation in the provincial environmental governance sphere.<sup>16</sup> Fragmentation may, in addition, be

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<sup>12</sup> Wessels *Environmental Authorisations* 19.

<sup>13</sup> See paragraphs 3.2.2-3.2.3 below.

<sup>14</sup> See chapter 3 below.

<sup>15</sup> Kotzé "Co-operative Environmental Governance" 169.

<sup>16</sup> Snyman "Towards Co-operative Governance in the North-West Province" 296-298.

attributed to the historical origin of the province, since the current provincial boundaries encapsulate parts of the former Transvaal and Cape provinces and Bophuthatswana homeland. The inevitable result is that national government departments have various district offices, which do not correspond with the current boundaries of the NWP. This fragmentation arguably does not further environmental protection and sustainable infrastructural development in the province. The *State of the Environment Report* (hereafter SoER) of the NWP acknowledges that an integrated approach to environmental governance is critical for addressing environmental-related challenges in the province.<sup>17</sup> Hence, questions arise as to the nature and extent of fragmentation in South Africa and the NWP, the reasons for fragmentation, and the disadvantages and challenges associated with fragmentation.

A fragmented environmental governance regime may not be beneficial to achieve sustainability, and integration endeavours may ultimately guide governance efforts on the road towards sustainable service-delivery. Theoretical concepts of integrated and holistic governance, integrated environmental management (hereafter IEM), co-operative environmental governance (hereafter CEG), and integrated pollution prevention and control (hereafter IPPC) may provide a basis to address fragmentation. Questions that arise in this regard include: what is understood under the concepts of integrated and holistic governance, IEM, CEG and IPPC; and how may these concepts be utilised to address fragmentation at policy and operational level in South Africa and the NWP?

## ***1.2 International perspectives***

There are established integrated environmental governance approaches in, *inter alia*, Finland and the Netherlands.<sup>18</sup> These approaches are based on the *European Union Directive on Integrated Pollution Prevention and Control* 96/61/EG (hereafter the IPPC Directive), that aims to integrate governance efforts pertaining to pollution prevention and control. An investigation of the provisions of the IPPC Directive, and

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<sup>17</sup> Directorate Environment and Conservation Management 2002 HYPERLINK <http://www.environment.gov.za/soer/reports/northwest/01%20Contents.pdf> 18 April 2003.

<sup>18</sup> See respectively chapters 5 and 6 below.

its implementation in Finland and the Netherlands may thus be relevant as part of a comparative study to suggest possible solutions for the current fragmented and disjointed environmental governance regime in South Africa and the NWP.

### 1.2.1 *The European IPPC Directive*

The European Union (hereafter the EU) established the IPPC Directive to address pollution by industrial installations.<sup>19</sup> The IPPC Directive is based on the concept of IPPC.<sup>20</sup> All installations covered under the IPPC Directive are required to obtain an authorisation from the relevant authorities in the EU country they are situated.<sup>21</sup> The IPPC Directive aims to harmonise authorisation procedures and conditions in the EU, and contains directive provisions pertaining to integrated authorisations.<sup>22</sup> 'Integrated' in this context refers, amongst others, to authorisations that must take into account the whole environmental performance of an installation, including activities relating to air, soil and water pollution.<sup>23</sup> It may also imply that various individual authorisations are integrated, or at least fully coordinated by one authorisation, which is issued by a single environmental authority or by several authorities operating under the strong coordination of a lead agent.<sup>24</sup>

### 1.2.2 *The Netherlands*

The Netherlands enacted the *Environmental Management Act*, 1993 (*Wet milieubeheer*) (hereafter the EMA), which, *inter alia*, describes a system of integrated and uniform issuing of authorisations.<sup>25</sup> Although the EMA preceded the establishment of the IPPC Directive, it is based on the provisions of the Directive. The Dutch government states in this regard that the EMA provisions conform to the IPPC Directive provisions on the establishment of an integrated pollution prevention and control strategy.<sup>26</sup> The EMA does not provide for a complete integration of the

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<sup>19</sup> See chapter 4 below.

<sup>20</sup> See paragraph 2.8 below.

<sup>21</sup> Jongma *De Milieuvergunning* 36, and chapter 4 below.

<sup>22</sup> Jongma *De Milieuvergunning* 36.

<sup>23</sup> See paragraph 2.8 and chapter 4 below.

<sup>24</sup> See paragraph 4.4 below.

<sup>25</sup> See chapter 6 below.

<sup>26</sup> Gilhuis 1999(12) *Milieu en Recht* 283.

Dutch authorisation system, since authorisations pertaining to some issue-specific and sectoral environmental media and forms of pollution are still regulated by sectoral legislation (and subsequently different government departments). The EMA however revolutionised authorisations in the Netherlands by providing for the so-called EMA authorisation. The EMA authorisation replaced the previous sectoral authorisation approach by integrating authorisations under legislation pertaining to, *inter alia*, pollution by chemical substances, air pollution, noise pollution and soil pollution. Depending on the type of activity and installation which require an authorisation, the authorisation will be issued by either the municipality, or by the provincial executive, which is legally obliged to coordinate all administrative activities relating to the authorisation procedure.

### 1.2.3 Finland

The Finnish approach to IPPC emphasises three principles of importance upon which environmental policy concerning industrial activities are based. These principles include: broad-based participation of all relevant stakeholders in the preparation of legislation; strict, but practical implementation of authorisation provisions where operators are given adequate freedom to identify and implement technical measures to meet applicable requirements; and an authorisation process which is underlined by transparency and access to information.<sup>27</sup> Of further importance is the Finnish *Environmental Protection Act*, 2000 (hereafter the EPA). All the requirements embedded in the IPPC Directive, have been incorporated under the EPA.<sup>28</sup> Although there were previous attempts to integrate authorisations under a plethora of sectoral legislation, the enactment of the EPA, which was accompanied by major administrative reforms, led to the establishment of a comprehensive integrated approach to environmental authorisations.<sup>29</sup> The enactment of the EPA accordingly resulted in the centralisation of authorisation authorities, which are currently divided into three levels namely, municipal authorities, regional environment centres and environmental authorisation authorities.<sup>30</sup> A further result of the EPA is also the

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<sup>27</sup> Silvo *et al* 2002 *Resources, Conservation and Recycling* 45, 51-52 and chapter 5 below.

<sup>28</sup> Silvo *et al* 2002 *Resources, Conservation and Recycling* 45.

<sup>29</sup> Silvo *et al* 2002 *Resources, Conservation and Recycling* 46.

<sup>30</sup> Kotzé "Co-operative Environmental Governance" 173.

establishment of integrated authorisation processes and procedures. The question that arises is whether the integrated approaches to pollution prevention and control of the IPPC Directive, the Netherlands and Finland, provide solutions to address governance fragmentation in South Africa and the NWP?

### ***1.3 Problem statement***

The overall study addresses the following research questions:

How may the concepts of integrated and holistic governance, IEM, CEG and IPPC be employed to address fragmentation of environmental governance efforts in South Africa and the NWP; and how may the integrated approach to pollution prevention and control in the EU suggest possible solutions to address fragmentation in South Africa and the NWP?

### ***1.4 Aims of the study***

Specific aims of the study are:

1. To analyse the concepts of sustainability, integrated and holistic governance, CEG, IEM, and IPPC;
2. To critically discuss the existence of fragmentation in the South African and NWP environmental governance sphere, the extent of this fragmentation and possible reasons therefore, including unsustainable organisational behaviour by government officials that may exacerbate fragmentation;
3. To do a comparative study of the integrated approach to IPPC provided for by the IPPC Directive;
4. To do a comparative study of the integrated approach to environmental governance in Finland and the Netherlands that are based on the IPPC Directive; and

5. To propose a framework for integrated environmental governance for South Africa and the NWP.

### **1.5 Research methodology**

This research entails an analytical literature study of the concepts of sustainability, fragmentation, integrated and holistic governance, CEG, IEM and IPPC. The research furthermore investigates, by way of a literature study, the current fragmented environmental governance regimes in South Africa and the NWP. In this regard, the empirical method (a qualitative study) was applied in order to solicit comments by way of unstructured individual interviews and various workshops.<sup>31</sup>

A comparative study is undertaken to ascertain the possibility of applying the comparative solutions presented by the IPPC Directive and the integrated approaches of Finland and the Netherlands. The comparative study includes: an investigation of the concept of IPPC established in the EU environmental law regime by the IPPC Directive, as well as an investigation of the authorisation regimes and environmental authorities and their roles in different spheres of government in terms of the Dutch and Finnish environmental law systems.<sup>32</sup> These countries are chosen because they have introduced integrated environmental authorisation and governance systems into their domestic regimes which seem to facilitate a more integrated and sustainable environmental governance effort in practice.<sup>33</sup>

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<sup>31</sup> See Centre for Environmental Management *Report on an Environmental Management System for the North-West Province* 33-482.

<sup>32</sup> The Finnish legal system was chosen as it was part of a mandate given by the Department of Agriculture, Conservation and Environment, North-West Province, and the Finnish Environment Institute, who also provided financial support for this research. Limited primary legal sources have been employed in chapter 5 because the majority of sources are only available in Finnish which is an inaccessible language to the author. The research methodology accordingly employed in chapter 5, consists of a literature study of primary legal sources, where available in English, as well as information gathered by way of unstructured interviews with a variety of experts involved in Finnish environmental law, governance and administration.

<sup>33</sup> The results of a research visit conducted during May and June 2003, and September 2004, suggest that these countries have comprehensive legal regimes consisting of well-established administrative structures and procedures that are based on comprehensive legislative provisions, to ensure an integrated approach to environmental governance in a co-operative, coordinated, integrated and sustainable fashion. It seems that these integration mechanisms provide for a more integrated and sustainable governance effort in practice.

## **1.6     *Structure of the thesis***

This study commences with a discussion of the theoretical foundations of the thesis including: the concepts of sustainability, integrated and holistic governance, regulatory fragmentation, organisational behaviour in environmental administration, IEM, CEG, and IPPC.<sup>34</sup> The prevailing environmental governance regime in South Africa is then discussed, followed by an analysis of the NWP environmental governance regime. This part of the study also includes an investigation of the specific application of the theoretical concepts of IEM, CEG and IPPC in South Africa and the NWP.<sup>35</sup> A critical overview of the IPPC Directive is then given,<sup>36</sup> followed by a discussion of the Finnish<sup>37</sup> and Dutch<sup>38</sup> approaches to integrated environmental governance. Lastly, conclusions will be drawn and recommendations made regarding the propriety of establishing a sustainable and integrated environmental governance regime in South Africa and the NWP.<sup>39</sup>

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<sup>34</sup> See chapter 2 below.

<sup>35</sup> See chapter 3 below.

<sup>36</sup> See chapter 4 below.

<sup>37</sup> See chapter 5 below.

<sup>38</sup> See chapter 6 below.

<sup>39</sup> See chapter 7 below.



## **THEORETICAL FOUNDATIONS**

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## **Chapter 2: Theoretical foundations**

### **2.1            *Introduction***

This thesis addresses the integration of environmental governance policies, structures and processes, with specific reference to current environmental authorisation regimes in South Africa and the NWP. This entails a multi-disciplinary approach that involves an investigation of key concepts from a number of different disciplines which either directly, or indirectly, relate to the integration of environmental governance regimes.<sup>1</sup> Sustainability, fragmentation, holistic governance, IEM, CEG, IPPC, and organisational behaviour in environmental administration, form the core concepts and thus the points of departure for the purposes of this study. It is argued that whilst sustainability describes the ultimate objective of an integrated environmental authorisation regime,<sup>2</sup> fragmentation,<sup>3</sup> which may be caused by various factors, including organisational behaviour of government officials,<sup>4</sup> may hinder the achievement of sustainability. It is furthermore argued that sustainable governance results may best be achieved if an integrated or holistic form of governance is established.<sup>5</sup> It is also argued that integration, and accordingly, sustainability, may be achieved by way of an integrated environmental authorisation system that is based on holistic governance, IEM, CEG, and IPPC.<sup>6</sup>

These concepts have been chosen for the possible solutions they present to address fragmentation in the South African and NWP environmental governance sphere. A discussion of these concepts is accordingly meant to establish a framework within which integration in terms of environmental governance should be understood, and possibly established.

The following questions need to be answered in order to satisfy the theoretical premise of this study:

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<sup>1</sup> Apart from law, specific themes in the realm of public administration and environmental management are investigated. See paragraphs 2.4 and 2.6 below.

<sup>2</sup> See paragraph 2.2 below.

<sup>3</sup> See paragraph 2.3 below.

<sup>4</sup> See paragraph 2.4 below.

<sup>5</sup> See paragraph 2.5 below.

<sup>6</sup> See paragraphs 2.6-2.8 below.

1. What does sustainability entail; what is its relevance for the integration of authorisation processes; and is the current environmental law framework conducive for sustainability in South Africa?
2. What does fragmentation of environmental governance efforts entail; what is the extent of this fragmentation; and what are the disadvantages of fragmentation?
3. How does organisational behaviour in the ranks of government departments contribute to fragmentation in the context of environmental administration, governance and authorisation processes?
4. What does integration and holistic governance entail in terms of environmental governance, and how may it contribute to address fragmentation in South Africa and the NWP?
5. What does IEM entail and how may it contribute to address fragmentation of environmental governance efforts in South Africa and the NWP?
6. What does CEG entail and how may it contribute to address fragmentation of environmental governance efforts in South Africa and the NWP?
7. What does IPPC entail and how may it contribute to address fragmentation of environmental governance efforts in South Africa and the NWP?

## 2.2 Sustainability

The achievement of sustainable development is a constitutional obligation enumerated in section 24 of the 1996 Constitution.<sup>7</sup> Section 24 obliges government to ensure sustainable development through reasonable legislative and other measures.<sup>8</sup> Hence, the achievement of sustainable development is typically a regulatory function, which may be facilitated by way of, *inter alia*, environmental governance.<sup>9</sup>

It should be noted from the outset that, although the South African legal system acknowledges sustainable development as a concept, this study does not primarily concern itself with this concept, but rather with the concept of sustainability. Sustainable development is an abstract and general term. Its meaning may vary, depending on the context in which it is used.<sup>10</sup> This study supports the view that sustainable development should be regarded as a mechanism that may be utilised to achieve sustainability. Moreover, sustainability may provide more precise parameters within which an integrated environmental authorisation system could achieve

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<sup>7</sup> See also paragraph 1.1 above. It should be pointed out that development must not only be sustainable, but also justifiable. Whilst sustainable development should be secured, it is required by section 24(b)(iii) that justifiable development should be promoted. This differentiation is arguably intended to mean that sustainable development should, first and foremost, be established in order to further justifiable development. As far as could be established, the concept of justifiability is not defined in the 1996 Constitution, or in sectoral environmental legislation. Justifiability is however firmly established in section 33 and section 36 of the 1996 Constitution that deal respectively with just administrative action by organs of state and the limitation of rights. Burns *Administrative Law* 225-239 interprets the concept of justifiability in the context of just administrative action, with reference to essential elements contained therein. These elements include reasonableness, rationality and proportionality. De Ville 1995 *South African Journal on Human Rights* 272-274, on the other hand, opts for a definition of justifiability that emphasises the elements of suitability, necessity and proportionality. It is accordingly proposed that justifiability is an abstract and relative concept and should, in environmental context, be considered to describe development that should be rational, reasonable, proportional, necessary and suitable within the boundaries of section 24 of the 1996 Constitution. Translated into practice, the realisation of sustainable development should promote and further justifiable development. See also in this regard Ferreira 1999 *Journal of South African Law* 438-443.

<sup>8</sup> Section 24(b) of the 1996 Constitution, and paragraph 1.1 above.

<sup>9</sup> Pollution prevention is arguably one of the ways by which sustainable development may be achieved. According to Bosman *Waste Disposal or Discharge* 28, the most obvious feature of potential pollution is that it may affect resources, such as water, soil, vegetation and animal life. The control of pollution is a regulatory function, because the environment and the public must in terms of, *inter alia*, section 24 of the 1996 Constitution, be protected from polluting activities that may have adverse effects on the environment. An environmental authorisation is an example of a governance tool that may be used by environmental governance bodies to regulate pollution. Moreover, an integrated system of environmental authorisations may arguably contribute to effectively and sustainably regulate pollution. See also paragraph 2.8 and chapter 4 below.

<sup>10</sup> See for example Hurrell and Kingsbury *International Politics of the Environment* 42-43, and paragraph 2.2.1 below.

sustainable results. It is argued in this regard that the ultimate goal of environmental governance reform from fragmentation to integration should be the realisation of sustainability in the context of the principles of sustainability.<sup>11</sup>

The concept of sustainability is investigated in subsequent paragraphs. This investigation entails an analysis of the differences between sustainability and sustainable development; the content and nature of sustainability; and the relationship between sustainability, holistic governance, IEM, CEG, IPPC, and environmental authorisations. Some suggestions are made on whether the South African environmental law regime is conducive for sustainability.

### *2.2.1 Sustainable development: a need for redefinition*

The concept of sustainable development was formally established in 1987 by the well-known Brundlandt Report which defines it as "... development that meets the needs of the present generation without compromising the ability of future generations to meet their own needs".<sup>12</sup> Sustainable development is furthermore endorsed and defined by various international law instruments, the most prominent of which are arguably the *Stockholm Declaration of the United Nations Conference on the Human Environment*, 1972 (hereafter the Stockholm Declaration),<sup>13</sup> and the *Rio Declaration on Environment and Development*, 1992 (hereafter the Rio Declaration).<sup>14</sup> Principle 1 of the Stockholm Declaration espouses the concept of sustainable development by stating that:

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<sup>11</sup> Volkery *et al* "Coordination, Challenges and Innovations" 10, argue that the issue of sustainability is becoming an increasingly important concern for governments across the world. Inter-governmental coordination strategies are furthermore important in order to achieve sustainability. One of the reasons that coordination demands have not been met, is because governments are faced with problems of different understanding of the concept of sustainability. It is thus clear that, whilst the achievement of sustainability is of primary importance, this should be done by way of, amongst others, coordinated governance efforts, which should be based on a sound understanding of the concept of sustainability.

<sup>12</sup> *Our Common Future* 1987 United Nations General Assembly Resolution 4221186 11 December 1987. For some general observations on the Brundlandt Report, see Sands *International Courts* 147.

<sup>13</sup> The Stockholm Declaration is widely regarded as a turning point in the development of a new paradigm in environmental thinking. See in this regard Economy and Schreurs *Environmental Politics* 1.

<sup>14</sup> See also Swanson and Johnston *Global Environmental Problems* 203, and Birnie and Boyle *International Law and the Environment* 84-97. In the realm of international environmental law, the concept of sustainable development can also be found in, *inter alia*, article 24 of the *African Charter on Human and Peoples' Rights*, 1981, article 2 of the *Framework Convention on Climate Change*, 1992 and the *Convention on International Trade in Endangered Species of Wild Fauna and Flora*, 1973, and the *Convention on Biodiversity*, 1992.

Man has the fundamental right to freedom and equality and adequate conditions of life, in an environment of a quality that permits a life of dignity and well-being, and he bears a solemn responsibility to protect and improve the environment for present and future generations.

Principle 3 of the Rio Declaration provides that the right to development must be fulfilled in order to meet developmental and environmental needs of present and future generations in an equitable fashion.<sup>15</sup> The foregoing principles are arguably intended to "...ensure equitable access to our planetary natural and cultural environment and at the same time to recognize limits on how we can pass it to future generations in as good condition as we received it".<sup>16</sup> Sustainable development should accordingly be aimed at integrating, or reconciling, the potentially competitive societal objectives of the environment and development.<sup>17</sup> It may be derived from the foregoing that sustainable development emphasises achieving of an equilibrium between environmental protection and long-term growth and welfare that would be beneficial to present and future generations.<sup>18</sup>

However, one of the main problems with the concept of sustainable development is providing a precise definition or explanation of what it entails in practice.<sup>19</sup> It has been observed in this regard that sustainable development is a "...transcendent term', subject to frequent but imprecise usage".<sup>20</sup> Furthermore, sustainable development is an inherently complex notion that derives its content from a multi-dimensional and multi-disciplinary framework.<sup>21</sup> Thus, the already vague concept is further clouded, because diverse meanings are attributed to it by scientists and policy-makers who emphasise their respective sub-disciplines' perspectives.<sup>22</sup> It has also been suggested

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<sup>15</sup> Equity in this context refers to inter-generational equity which should, broadly speaking, address the depletion of resources, degradation in environmental quality and discriminatory access and use of resources. See in this regard Weiss *In Fairness to Future Generations* 6-15. Although the Rio Declaration refers to the 'right to development', as far as could be established, no corresponding right to development exists in South African law. Kotzé and Van der Walt 2003 *South African Journal of Environmental Law and Policy* 40.

<sup>16</sup> Weiss *In Fairness to Future Generations* 39.

<sup>17</sup> Sands *International Courts* 150, and Swanson and Johnston *Global Environmental Problems* 30.

<sup>18</sup> Bray 1998 *South African Journal of Environmental Law and Policy* 1.

<sup>19</sup> It should further be noted in this regard that the concept of sustainable development is sometimes used indiscriminately and incoherently with concepts such as 'sustainable utilisation' and 'sustainable growth'. Smith *Impact Assessment* 3.

<sup>20</sup> Smith *Impact Assessment* 3, and Birnie and Boyle *International Law and the Environment* 44-47. Urquhart and Atkinson *Pathway to Sustainability* 18, also state that sustainable development is a 'chameleon' concept that can be expressed in various ways.

<sup>21</sup> These various disciplines include, amongst others: ecology, economics, social and development studies, and philosophy. See further, Van Jaarsveld *et al Implementing Sustainable Development* 4.

<sup>22</sup> Van Jaarsveld *et al Implementing Sustainable Development* 4.

that sustainable development, as a concept, is difficult to translate into practical policy goals that governments, industry and other organisations can adopt.<sup>23</sup> Even if policy goals in terms of sustainable development can be defined, it is questionable whether it can be implemented and evaluated.

Birnie and Boyle<sup>24</sup> point out that the process of giving the concept of sustainable development more precise content is far from complete. It is a challenge that should urgently be addressed by lawyers, governments and other relevant stakeholders. Consequently, sustainable development needs to be redefined. It is proposed hereafter that the concept of sustainability may provide a more precise meaning of what is intended to be the ultimate aim, or result, of, amongst others, an integrated environmental governance regime.<sup>25</sup>

### 2.2.2 *Sustainability explained*

Although sustainability and sustainable development appear *prima facie* to be similar concepts, this study proposes that there are distinct differences between these concepts.

Whilst sustainable development requires a long-term approach for the establishment of an equilibrium between development and the environment, sustainability refers to activities or conditions that can be maintained in future without constant external inputs.<sup>26</sup> Put differently, sustainability is the ability to maintain a desired condition over time without eroding natural, social and financial resource bases.<sup>27</sup> These descriptions of sustainability exude a common aspect, namely that of establishing equity between generations through strategies that maintain a desired condition over a prolonged period of time. This is the theory of inter-generational equity which is the moral principle behind sustainability. Its main objective is to maintain natural

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<sup>23</sup> Roberts *Environmental Policy* 88.

<sup>24</sup> Birnie and Boyle *International Law and the Environment* 47.

<sup>25</sup> See paragraph 2.2.2 below.

<sup>26</sup> Urquhart and Atkinson *Pathway to Sustainability* 19.

<sup>27</sup> Nel "EMS' Potential as a Tool for Urban Environmental Issues" 3, and Centre for Environmental Management *Report on an Environmental Management System for the North-West Province* 34.



resources for future generations.<sup>28</sup> Inter-generational equity describes the optimum basis for the relationship between generations that requires of one generation to use its resources in such a way that they may be passed on to future generations in no worse a condition than they were received.<sup>29</sup> A sustainable ecological state of equilibrium may be achieved through the long-term aim of sustainability,<sup>30</sup> in terms of a process of continual improvement.<sup>31</sup> So defined, sustainability is the ultimate goal to be achieved.<sup>32</sup> The variable and poorly defined process by which this is to be achieved, is sustainable development.<sup>33</sup>

Moreover, sustainable development is primarily concerned with the fulfilment of triple-bottom line success, which is aimed at maintaining, or improving, natural,<sup>34</sup> social,<sup>35</sup> and financial<sup>36</sup> resource basis or capital.<sup>37</sup> Sustainability on the other hand is arguably more comprehensive in nature. It may mean the integration, coordination and harmonisation of consideration pertaining to the environment; the economy; social factors; environmental governance and management efforts; and the involvement of all interested and affected parties, including the public and industry. In terms of this description, a more precise methodology is attributed to the achievement of sustainable results. The integration and harmonisation of these components, and the process of continual improvement, are furthermore based on various principles of sustainability. This study argues that it is specifically in

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<sup>28</sup> Bosman *Waste Disposal or Discharge* 8-9; Weiss *In Fairness to Future Generations* 17-46, and Dovers and Handmer 1993 *Environmental Conservation* 218-219. The theory of intergenerational equity must also be extended to include intra-generational equity. Intra-generational equity refers to equity among members of a specific generation. See further in this regard, Weiss *In Fairness to Future Generations* 21, and Birnie and Boyle *International Law and the Environment* 91-92.

<sup>29</sup> Birnie and Boyle *International Law and the Environment* 89.

<sup>30</sup> Bosman *Waste Disposal or Discharge* 9.

<sup>31</sup> Urquhart and Atkinson *Pathway to Sustainability* 18.

<sup>32</sup> Bosman *Waste Disposal or Discharge* 9, and Baloyi *Evaluation of South African Environmental Legislation* 1.

<sup>33</sup> Dovers and Handmer 1993 *Environmental Conservation* 217-222.

<sup>34</sup> Ecological sustainability concentrates on the resource base as the object of sustainability and therefore it aims to sustain global life-support systems in an indefinite way. See further Baloyi *Evaluation of South African Environmental Legislation* 1-8.

<sup>35</sup> Social sustainability describes the sustenance of all moral capital of a particular society. See in this regard Baloyi *Evaluation of South African Environmental Legislation* 7.

<sup>36</sup> Economic sustainability refers to the maximisation of the net benefits of economic development that is subject to the maintenance of services and quality of natural resources over time. See in this regard Baloyi *Evaluation of South African Environmental Legislation* 1-8.

<sup>37</sup> It is proposed that these three dimensions of sustainable development are inter-dependent. Whilst the one cannot exist without the other, it may be construed from the above that social, environmental and economic sustainable development have to be present in order to constitute a sound understanding of sustainability. See in this regard Baloyi *Evaluation of South African Environmental Legislation* 5-8.

achieving these principles that activities relating to the environment may be directed on a sustainable path through a process of continual improvement. These principles include, amongst others: the precautionary approach, the polluter pays principle, the cradle to grave principle, the principle of an integrated and holistic approach, the principle that due consideration must be given to all alternatives, the principle of continuous improvement, accountability and liability, transparency and democracy, waste reduction, internalisation of costs, improvement of quality of life, and co-operative governance.<sup>38</sup> It is noteworthy that one of the principles of sustainability is that of an integrated and holistic approach to environmental governance and environmental management. This suggests an integration of traditional scientific realms, and an integrated and holistic approach to the management and governance of potential and actual impacts on the environment.<sup>39</sup> This may be specifically relevant for the fragmented environmental governance sphere in South Africa and the NWP. For current fragmented environmental governance and management efforts to be sustainable, it is necessary that policies, structures and procedures, *inter alia*, be integrated.<sup>40</sup> This may be done by way of holistic governance, IEM, CEG and IPPC and an integrated environmental authorisation system, as is further argued in this thesis.<sup>41</sup>

In light of the foregoing, sustainability may be defined for the purpose of this study as:

The ability to maintain a desired condition over time without eroding natural, social and financial resource bases, through a process of continual improvement in the form of sustainable development. Sustainability also relates to the integration of various considerations, including: the environment, the economy, social factors, environmental governance and management efforts, and public and industry involvement. Sustainable results may be achieved through application, implementation and enforcement of the various principles of sustainability and continual monitoring and post-decision follow-up of the results of these efforts.

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<sup>38</sup> See Bosman *Waste Disposal or Discharge* 11-12, Nel and Du Plessis 2001 *South African Journal of Environmental Law and Policy* 6-7, and section 2 of the NEMA.

<sup>39</sup> Bosman *Waste Disposal or Discharge* 12.

<sup>40</sup> Other principles and approaches that relate to the integration principle, include: the holistic or cradle-to-grave approach; the product life-cycle approach; the project life-cycle approach; the environmental management life-cycle approach; consideration of impacts prior to action; creation of alliances and partnerships; setting of norms and standards; the duty of care approach; and co-operative governance practices. See Nel and Du Plessis 2001 *South African Journal of Environmental Law and Policy* 6-7.

<sup>41</sup> See paragraphs 2-5-2.8 and chapter 3 below.

### 2.2.3 Sustainability and South African environmental law

The South African legal order provides for, and endorses the concept of sustainable development.<sup>42</sup> Although the concept of sustainability is also provided for in some instances, its application possibilities and content are obscure.<sup>43</sup> As far as could be established, sustainability is only defined in the *National Environmental Management: Biodiversity Act* 10 of 2004. Section 1 of this act defines sustainability as:

...the use of such resource in a way and at a rate that-

- (a) would not lead to its long-term decline;
- (b) would not disrupt the ecological integrity of the ecosystem in which it occurs; and
- (c) would ensure its continued use to meet the needs and aspirations of present and future generations of people.

This definition correlates to a certain extent with the proposed definition of sustainability in paragraph 2.2.2 above, but is only applicable to a single sector, namely biodiversity. Some of the principles of sustainability referred to above are however recognised in the *National Environmental Management Act* 107 of 1998 (hereafter the NEMA).<sup>44</sup> As far as constitutional and environmental framework legislation provisions are concerned, it may at least be argued that although sustainability is not explicitly provided for by the 1996 Constitution and the NEMA, that the concept is implied by these provisions.<sup>45</sup> Consequently, although sustainability is not comprehensively provided for, nor explained by environmental legislation, it is clear that some of its foundations are found in South African environmental law.

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<sup>42</sup> See paragraph 1.1 above.

<sup>43</sup> See for example the preamble of the *National Water Act* 36 of 1998, chapter 2 and section 25 of the *Water Services Act* 108 of 1997, and section 74(2)(e) of the *Local Government: Municipal Systems Act* 32 of 2000.

<sup>44</sup> See section 2 of the NEMA that provides for some of the principles of sustainability. See also Nel and Du Plessis 2001 *South African Journal of Environmental Law and Policy* 6-7, for a discussion on these principles in terms of the NEMA.

<sup>45</sup> This may also be derived from the values enshrined in the 1996 Constitution which indirectly relate to sustainability. These include, *inter alia*: human dignity, the achievement of equality and the advancement of human rights and freedoms, supremacy of the 1996 Constitution and the rule of law, and a multi-party system of democratic government, to ensure accountability, responsiveness and openness.

For the sake of legal certainty, uniform implementation of environmental laws and enforcement of laws in an integrated and consistent manner, it is proposed that future amendments to existing environmental laws should take cognisance of the differences between these two concepts, and especially the benefits of basing the domestic environmental law regime on the concept of sustainability. It is further clear from the foregoing that the South African environmental law regime is conducive to the achievement of sustainability.

#### 2.2.4 *Relevance of sustainability for this study*

The relevance of sustainability for the integration of environmental governance efforts is evident from the wording of section 24 of the 1996 Constitution. According to section 24, sustainable development must be achieved through 'reasonable legislative and other measures'.<sup>46</sup> Although section 24 specifically provides for the concept of sustainable development, it is proposed, based on the exposition in previous paragraphs,<sup>47</sup> that the achievement of sustainability is implied by section 24. It is thus arguable that sustainability must be achieved by way of 'reasonable legislative and other measures'. Moreover, apart from the section 24 provisions, the values of the 1996 Constitution also support the objectives of sustainability.<sup>48</sup>

As far as could be established, 'reasonable legislative and other measures' is defined in neither the 1996 Constitution, the NEMA, nor other environmental legislation.<sup>49</sup> It is proposed that a literal meaning should be attached to the concept of 'reasonable legislative measures', which arguably explains it as policies, legislation and regulations that should be reasonable and subject to the provisions, principles and values of the 1996 Constitution and other environmental sectoral legislation.

It is further proposed that 'other measures' be afforded a wide meaning in order to provide for more comprehensive options that may be taken into account when the most suitable measure is selected to achieve sustainability. It is suggested that

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<sup>46</sup> Section 24(b) of the 1996 Constitution.

<sup>47</sup> See paragraph 2.2 above.

<sup>48</sup> See paragraph 2.3.3 above.

<sup>49</sup> Glazewski *Environment* 413, proposes that reasonable legislative and other measures can only be provided by Parliament and organs of state. He also notes that the socio-economic character of section 24 of the 1996 Constitution is embodied in these measures.

environmental authorisations may serve, amongst others, as a 'measure' to achieve sustainability. Environmental authorisations are provided in terms of 'reasonable legislative measures' including policies, legislation and regulations, and are regulated by certain designated environmental governance authorities.<sup>50</sup> Environmental authorisations therefore form a part of the legislatively required measures that should ensure the achievement of sustainability in terms of section 24 of the 1996 Constitution and other environmental legislation. An integrated system of environmental authorisations may thus be utilised in this context to address the tension between developmental and environmental considerations through environmental governance regulation, in order to ultimately achieve sustainable results. Moreover, reasonable legislative and other measures, which may include environmental authorisations, may also be employed to realise the principles of sustainability, and hence achieve sustainable results.<sup>51</sup>

## **2.3        *Fragmentation of environmental governance efforts***

### **2.3.1   *Fragmentation explained***

The environmental governance sphere in South Africa is fundamentally fragmented.<sup>52</sup> Fragmentation includes: disjointed governance structures along separate, autonomous line functioning organs of state that operate at national, provincial and local spheres of government. Fragmented governance structures result in fragmented governance processes that culminate in fragmented policies. This may lead to disjointed legislation that emanates from separate policy processes. The separate organs of state are furthermore organised to either focus on specific environmental media,<sup>53</sup> or to address individual and sectoral-based issues.<sup>54</sup> Fragmented governance structures also result in disjointed and incremental governance processes that are fundamentally inefficient, with significant duplication and overlap of both governance mandates and

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<sup>50</sup> See chapter 3 below for some examples.

<sup>51</sup> See paragraph 2.8 below.

<sup>52</sup> See chapter 3 below. Fragmented environmental governance efforts seem to be a concern also in other countries such as Finland and the Netherlands. See chapters 5 and 6 below for a detailed discussion.

<sup>53</sup> Environmental media in this context include land air and water.

<sup>54</sup> These issues may include, *inter alia*, mining, radio-activity, water affairs, air quality control, development planning, biodiversity, and heritage resources.

adoption and use of governance tools, including environmental authorisations.<sup>55</sup> Structural fragmentation of environmental governance regimes includes fragmentation at different spheres, each with several autonomous line functionaries. This delineation creates a matrix framework of horizontal fragmentation between the individual spheres, as well as vertical fragmentation between the various line functionaries in each sphere.<sup>56</sup> The line functions of the national and provincial executives function independently from one another, and governance across the spherical divides is also largely discontinuous.<sup>57</sup> In light of the foregoing, it may be derived that fragmentation manifests in various ways. These include: horizontal and vertical fragmentation; fragmentation of legislation; fragmentation of policies; and fragmentation of governance processes, tools and procedures.<sup>58</sup>

Fragmented, or baronial, incremental and disjointed governance, as it is sometimes referred to, is described as the '...at best disappointing and at worst unacceptable...' way of governance.<sup>59</sup> There are a number of general reasons for the existence of fragmented governance. These include: greater ease of management and expenditure control on inputs; accountability for probity; consumer orientated government; strategic decisions for functional organization; and democratic pressures for visible commitments to services in input or throughput terms.<sup>60</sup>

### 2.3.2 *Disadvantages of fragmentation*

Fragmentation poses various disadvantages, which may include, amongst others: duplication and overlap of the governance effort, with all organs of state focusing on environmental authorisation processes without having resources available to do post-authorisation follow-up; costly delays in decision-making; inefficient arrangements between organs of state that control similar activities or proposals; significant gaps in

<sup>55</sup> Nel, Kotzé and Snyman "Strategies to Integrate Environmental Policy" 2-3.

<sup>56</sup> Nel, Kotzé and Snyman "Strategies to Integrate Environmental Policy" 2-3.

<sup>57</sup> Nel, Kotzé and Snyman "Strategies to Integrate Environmental Policy" 2-3.

<sup>58</sup> Fragmentation as it manifests in South Africa and the NWP, is discussed in chapter 3 below.

<sup>59</sup> 6 *et al Towards Holistic Governance* 33. Fragmented governance has also been referred to as 'dispersed', 'multitudinous', 'duplicated', 'fractured' and 'contradictory' governance. See in this regard Stein 1997 *South African Journal of Environmental Law and Policy* 253. It is proposed that these terms hold the same meaning by describing what fragmented governance is not, namely, coherent, co-operative, coordinated, collaborative, integrated, holistic, aligned, or streamlined governance. For the purpose of this study, the term 'fragmentation' is employed.

<sup>60</sup> See for a more detailed discussion 6 *et al Towards Holistic Governance* 40-41.

control arrangements, whilst some pertinent issues are not controlled at all; inconsistent behaviour by government officials; conflicting conditions in authorisations; ineffective governance; and externalisation of governmental inefficiencies to development costs which may result in negative impacts on development.<sup>61</sup> Moreover, it is evident from this exposition that the various disadvantages posed by fragmentation may ultimately inhibit the achievement of sustainable service-delivery results.<sup>62</sup>

Further disadvantages of fragmented environmental governance efforts include that: it is costly and time-consuming; it negates the achievement of common problems and concerns; it does not lead to sustainable governmental service delivery efforts; it is not an all-inclusive process that involves interested and affected parties that may be affected by government action; it does not provide for streamlined and aligned governance efforts; it does not enable the utilisation of various tools for governance; it is aimed at achieving single policy-based objectives rather than objectives that may be common to various policies; and it may lead to results contrary to democratic governance that should ideally be based on the realisation of fundamental human rights, including the section 24 environmental right.<sup>63</sup> Moreover, fragmented governance may lead to dumping of problems and costs by one organ on another, conflicting programmes and policy goals, duplication, inadequate sequencing and inadequate response to needs in terms of service-delivery.<sup>64</sup> In terms of environmental governance, fragmented governance is furthermore contrary to the very nature of the environment as an integrated, inter-related and holistic phenomenon.<sup>65</sup> In short, fragmented governance is the direct opposite of holistic governance, and may, based on the disadvantages discussed above, lead to unsustainable results.<sup>66</sup>

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<sup>61</sup> Nel, Kotzé and Snyman "Strategies to Integrate Environmental Policy" 3. See also chapter 3 below for a further discussion on the disadvantages posed by fragmentation.

<sup>62</sup> See paragraph 2.2 above.

<sup>63</sup> Nel, Kotzé and Snyman "Strategies to Integrate Environmental Policy" 13-14.

<sup>64</sup> See for a more comprehensive discussion 6 *et al Towards Holistic Governance* 37-39.

<sup>65</sup> The integrated and holistic nature of the environment is evident from the section 1 the NEMA definition of 'environment', which explains that environment means: the surroundings within which humans exist and that are made up of the land, water and atmosphere of the earth; micro-organisms, plant and animal life; any part or combination of the foregoing and the interrelationships among and between them; and the physical, chemical, aesthetic and cultural properties and conditions of the foregoing that influence human health and well-being. See also paragraph 2.6.3 below.

<sup>66</sup> See paragraph 2.2 above.

It is argued in subsequent paragraphs that the concepts of holistic governance, IEM, CEG, IPPC and an integrated environmental authorisation system may provide a basis to address fragmentation and facilitate sustainability.<sup>67</sup>

## ***2.4 Environmental governance, public administration and organisational behaviour***

### ***2.4.1 Contextual background***

Authorisations within the context of the environmental administration are tools that enable designated organs of state to administer, implement and enforce environmental laws.<sup>68</sup> During the administration of environmental law through the various tools, unfavourable organisational behaviour of government officials may aggravate the already fragmented environmental governance regime. Murphy<sup>69</sup> points out in this regard that there is a tendency in environmental bureaucracy to subdivide responsibility. This promotes fragmentary growth of institutionally separate and exclusive venues.<sup>70</sup> Fragmentation in this sense may result in sustainability not being achieved, because turf protection, bureaucracy, irrational decision-making and factors inherent to the administrative system of developing countries, may exacerbate fragmentation. Under these conditions, coordination, co-operation, comprehensive control, and holistic planning may be essential to address fragmentation.<sup>71</sup>

Henceforth, the following discussion on public administration include an investigation of underlying reasons that may cause governance efforts to be disjointed, fragmented, unco-operative and uncoordinated. The emphasis is therefore on organisational behaviour that contributes to fragmented governance efforts. This section also examines reasons for such behaviour by administrative organs and individuals involved with public administration in environmental context.<sup>72</sup>

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<sup>67</sup> See paragraphs 2.6-2.8 below.

<sup>68</sup> See paragraph 1.1 above.

<sup>69</sup> Murphy *Nature, Bureaucracy and the Rules of Property* 122.

<sup>70</sup> Murphy *Nature, Bureaucracy and the Rules of Property* 122.

<sup>71</sup> Murphy *Nature, Bureaucracy and the Rules of Property* 122.

<sup>72</sup> Specific problems experienced relating to organisational behaviour in the ranks of environmental governance authorities in South Africa and the NWP are discussed in chapter 3 below.



#### 2.4.2 Public administration and environmental governance

There are as many definitions of public administration as there are writings on this specific discipline. Public administration is defined for the purpose of this research as:

...the use of managerial, political, and legal theories and processes to fulfil legislative, executive and judicial governmental mandates for the provision of regulatory and service functions for the society as a whole or for some segments of it.<sup>73</sup>

Public administration deals with the nature and practice of government and the public sector, or the organisation of the state apparatus.<sup>74</sup> It is significant that this definition provides for governmental mandates, since it is specifically government that is responsible for the execution of public administrative functions. This implies that governance is not only an integral part of public administration, it also serves as the fundamental process to execute public administration.<sup>75</sup> Theunissen<sup>76</sup> observes in this regard that public administration involves state intervention, and that all interventions by the state naturally have a bearing on the quality of life of citizens.

In environmental context, organs of state such as the Department of Environmental Affairs and Tourism (hereafter DEAT), the Department of Water Affairs and Forestry (hereafter DWAF), the Department of Minerals and Energy (hereafter DME), and various provincial and local authorities are charged with environmental governance and administration obligations as a specific part of public administration.<sup>77</sup> The components of public administration, or environmental administration in this context,

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<sup>73</sup> Rosenbloom D *Public Administration: Understanding Management, Politics and Law in the Public Sector* (Random House New York 1986) quoted in Hughes *Public Management and Administration* 7. See also Bain *Administrative Process* 11-12, and Pauw *The Concept of Public Administration* 9-25 for other definitions of public administration. It should be noted in this regard that 'public administration' and 'public management' seem *prima facie*, to have the same meaning. Hughes *Public Management and Administration* 4-6 however points out that this is not the case, since administration has a narrower and limited function than management. Whilst management in this sense includes administration, the latter focuses primarily on processes, procedures and propriety. It may therefore, in addition, be argued that there is a correlation between public administration and IEM, because both concepts essentially relates to management. See paragraph 2.6 below.

<sup>74</sup> Theunissen *Administering National Government* 119.

<sup>75</sup> Dimock and Dimock *Public Administration* 6, observe that public administration describes the 'what' and the 'how' of government, thereby implying that public administration concerns governmental structures and processes.

<sup>76</sup> Theunissen *Administering National Government* 119.

<sup>77</sup> For the purpose of this study, public administration is referred to as environmental administration.

include, amongst others, the functions of government, the organisation of government, administrative co-operation and coordination, as well as the accountability of government.<sup>78</sup> This study primarily focuses on the last two components. Administrative coordination and co-operation describes, *inter alia*, the flow and process of administration in operation, leadership, direction, coordination and co-operation, delegation, relationships, morale and public relations.<sup>79</sup> Accountability of government pertains to internal controls in government and outside controls by the legislative and judicial authority as well as the public.<sup>80</sup> In order to ascertain the possible role of government officials in the creation of fragmentation and unco-operative and uncoordinated governance or administrative practices, it is necessary to investigate some aspects of organisational, institutional and human behaviour hereafter.

#### 2.4.3 *Organisational behaviour*

Evidence suggests that public officials are sometimes prone to act in protective, unco-operative, uncoordinated and unsupportive ways whilst executing administrative functions.<sup>81</sup> Meijers and Stead,<sup>82</sup> point out that attitudes, values and perceptions of personnel working in, for example, environmental organisations, may play a significant role in inhibiting organisational coordination, co-operation and integration.

Apart from the various factors discussed below which may give rise to fragmented environmental governance efforts,<sup>83</sup> other factors exist that may further contribute to fragmented and unco-operative governance practices. These factors primarily relate to the human component of public administration, or, organisational behaviour of

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<sup>78</sup> Dimock and Dimock *Public Administration* 6, and Vieg *The Growth of Public Administration* 7

<sup>79</sup> Dimock and Dimock *Public Administration* 6. Conflict that arises within the ranks of a fragmented governance sphere is inevitable. This conflict may lead to further fragmentation of structures and uncoordinated and unco-operative administrative or governance practices. Some of the main reasons for conflict in government include: bureaucratic jurisdiction, where government plans and programs compete with each other for survival; various specialists in a department compete for influence in the direction and control of specific programs; and the situation where administrators compete for income, status, influence and promotion. These factors may amplify the need for coordination, co-operation and accountability. See further, Dimock and Dimock *Public Administration* 259.

<sup>80</sup> Dimock and Dimock *Public Administration* 6.

<sup>81</sup> Centre for Environmental Management *Report on an Environmental Management System for the North-West Province* 368-374, and paragraph 3.3 below.

<sup>82</sup> Meijers and Stead "Policy Integration" 7.

<sup>83</sup> See paragraphs 2.3 above and 3.2 below.

individuals and group processes and actions.<sup>84</sup> These include, amongst others, political unresponsiveness, power struggles, administrative incapability and administrative insensitivity of officials. Subsequent paragraphs reflect on behavioural patterns of public officials and reasons for unco-operative administrative conduct that may cause, or contribute to, fragmentation in environmental administration and governance efforts.<sup>85</sup>

#### 2.4.3.1 Profit *versus* power

Whereas the private sector is arguably driven by profit, making it resourceful and efficient, government offers a service without the profit factor to encourage and drive it.<sup>86</sup> The driving force behind government officials may rather be described as 'power', and in this context, specifically the power to govern.<sup>87</sup> The reconciliation of the power of a community to act in its interests through government, may inevitably lead to distrust of public officials.<sup>88</sup> Moreover, public officials who wield power, may abuse such power to the disadvantage of the community they are meant to serve, to government as a whole, as well as to the disadvantage of other public officials who are tasked with governance functions. It is significant to note that one of the results of power abuse is so-called 'turf-protection' which in itself may lead to uncoordinated, unco-operative and competitive governance practices.<sup>89</sup> Turf-protection may be described as a situation where "...a bureaucracy sets an exaggerated value on the

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<sup>84</sup> Organisational behaviour is defined by Brooks *Organisational Behaviour* 2, as:

...the study of human behaviour in organizational contexts with a focus on individual and group processes and actions...it involves an exploration of organizational and managerial processes in the dynamic context of the organization and is primarily concerned with the human implications of such activity.

<sup>85</sup> This paragraph does not intend to provide an exhaustive list of factors and reasons that determine the conduct of government officials. The latter is a subject of study for sociology and the broader science of public administration. This research only focuses on some primary reasons for the current state of unco-operative, uncoordinated and unsupportive government practices which may contribute to fragmented environmental governance efforts in South African and the NWP. For a comprehensive discussion on organizational behaviour, see Griffin RW and O'Leary-Kelly AM (eds) *The Dark Side of Organizational Behaviour* (Jossey-Bass A Wiley Imprint San Francisco 2004), and Brooks I *Organisational Behaviour: Individuals, Groups and Organisation* 2<sup>nd</sup> ed (Prentice Hall Essex 2003).

<sup>86</sup> These services include, *inter alia*: maintenance of law and order, collection of revenue, protection of fundamental rights, allocation of goods and services, provision of adequate facilities, and control and regulation in its broadest defined sense. See in this regard Huque and Lee *Managing Public Services* 7, Freysen *Locus of Rights, Social Contract, and Justice* 27-30, Gladden *Approach to Public Administration* 29 and Murphy *Nature, Bureaucracy and the Rules of Property* 151.

<sup>87</sup> Gaus *Public Administration* 93-94, and Gladden *Approach to Public Administration* 110.

<sup>88</sup> Gaus *Public Administration* 94.

<sup>89</sup> Centre for Environmental Management *Report on an Environmental Management System for the North-West Province* 37-38.

maintenance of the institutional scheme of which it is the guardian, while the individual member of the bureaucracy magnifies his own function within it and is jealous of any encroachments by other functionaries".<sup>90</sup> Turf-protection is also referred to as 'baronial government' where the achievement of policy goals and expectations for service-delivery is overshadowed by conflict to ensure independence and control over mandates.<sup>91</sup> The abuse of power and the protection of turf, mandates and jurisdictions, may lead to further fragmentation in the environmental governance domain, with corresponding unsustainable results, such as bureaucracy.<sup>92</sup>

#### 2.4.3.2 Bureaucracy

Bureaucracy is defined as a system of government by departments, which are managed by state officials and not elected representatives.<sup>93</sup> A more stereotyped conception of bureaucracy advocates the public perception that government officials are bureaucrats who are inefficient, overly regulatory and incapable of promoting the public good.<sup>94</sup> Vieg<sup>95</sup> observes that "...bureaucracy is often one [of the expressions] of derision and contempt, harsher, to be sure, in some contexts than in others, but even at its mildest a word inviting one to sneer or scorn". Factors that may give rise to the perceived unflattering character of government officials include, *inter alia*: officiousness and frailty; administrative self-promotion; procedural rigmarole, and subjectivity;<sup>96</sup> rigidity; the notion that government officials are inclined to evade decision-making in order to avoid responsibility;<sup>97</sup> and lack of accountability, be it political or administrative.<sup>98</sup> These factors may not only contribute to bureaucracy, but may also explain the reasons for behaviour and decision-making of government officials in the execution of administrative functions, which in turn may significantly contribute to further aggravate fragmented environmental governance efforts.

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<sup>90</sup> Dimock and Dimock *Public Administration* 160.

<sup>91</sup> 6 *et al Towards Holistic Governance* 32, and paragraph 2.4 above.

<sup>92</sup> See paragraph 3.3 below. For an insightful discussion on bureaucracy in terms of environmental administration, see Murphy *Nature, Bureaucracy and the Rules of Property* 100-165.

<sup>93</sup> Crowther (ed) *Oxford Advanced Learner's Dictionary* 149. See also Hill *Sociology of Public Administration* 16-17.

<sup>94</sup> Kramer *Public Bureaucracy* 34 observes in this regard that bureaucracy is equated with red tape, delays, pettiness and rules preventing the working of common sense.

<sup>95</sup> Vieg *Bureaucracy: Fact and Fiction* 49.

<sup>96</sup> Vieg *Bureaucracy: Fact and Fiction* 50-52.

<sup>97</sup> Hill *Sociology of Public Administration* 17.

<sup>98</sup> Kaul *Public Service Delivery* 24.

#### 2.4.3.3 The human component and irrational decision-making

The conduct of government officials is inherent to human behaviour. This may strongly influence the dynamics inherent in any organisation.<sup>99</sup> Significant in this regard is the contention that the public official is the single most important component in determining the success and quality of any administrative organ, and that the performance of the organ stands in direct relation to the quality and success of the administrator.<sup>100</sup> Because the common denominator in public administration is human behaviour, it is essential that, *inter alia*: short-term, medium-term and long-term advantages be identified; the interests of all involved in public administration, including the public, be satisfied; goodwill be created; and administrators be energised and made co-operative.<sup>101</sup>

In this context, Sharkansky<sup>102</sup> explains public administration as a system of inputs, conversion and outputs. Whilst inputs include demands for policy, resources and support, opposition, and apathy from other government officials and the public; outputs entail services, goods, behavioural regulations, gestures, statements, and activities.<sup>103</sup> The behavioural patterns of government officials, or in other words the factors relating to the human component, are essentially located in the conversion process, because this is the stage during which decision-making occurs.<sup>104</sup> The conversion process entails the translation of inputs in the administrative system into deliverable outputs through decision-making, and includes formal administrative structures, procedures for decision-making, government officials' personal experience and predispositions, and mechanisms used to control officials.<sup>105</sup> During the conversion process, it is expected of government officials to make rational decisions.<sup>106</sup> Irrational decision-making relates to undesirable behaviour by

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<sup>99</sup> Bain *Administrative Process* 9, and Dimock and Dimock *Public Administration* 79.

<sup>100</sup> Coetzee "Challenges for the Public Administrator" 35.

<sup>101</sup> Dimock and Dimock *Public Administration* 79.

<sup>102</sup> Sharkansky *Public Administration* 4-8.

<sup>103</sup> Sharkansky *Public Administration* 4-8.

<sup>104</sup> Sharkansky *Public Administration* 41 notes the importance of decision-making in this regard by stating that decisions "...affect the contributions that administrative agencies make to political, social, and economic phenomena in their environment and the benefits that administrative agencies extract from their environment".

<sup>105</sup> Sharkansky *Public Administration* 7, 41.

<sup>106</sup> Rational decision-making entails that a government official must identify a problem; clarify goals and objectives and prioritise them; identify all means to achieve the goals, assess costs and benefits of

government officials. Government officials are subject to various demands and constraints which may affect decision-making. These include: the public's view towards government employees; demands, resources and support from the public, and other branches of government such as the executive, judiciary and legislature; demands, resources and support from other institutions in government through vertical and horizontal relationships; social backgrounds, skills and values of individual government officials; and structures, procedures and precedents of administrative units.<sup>107</sup>

More important however, are the factors that may give rise to irrational decision-making.<sup>108</sup> These factors include: various problems, goals and policy-commitments imposed on officials; constraints on obtaining information and availability of information to make a decision; needs, commitments, inhibitions and inadequacies of individual officials; structural difficulties inherent in the administrative organ; and deviant behaviour of individual officials.<sup>109</sup> Also noteworthy in this regard are the factors listed by 6 *et al*<sup>110</sup> which include: attempts by politicians to seize control of the executive and administration; the creation of professional monopolies to secure autonomy in decision-making; and maximisation of control and influence over administration, especially by senior government officials.

These factors may to some extent explain the sometimes political unresponsive, administratively incapable, and insensitive behaviour of government officials that occur in the ranks of the public administration.<sup>111</sup> These factors may contribute

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alternative means; and select the combination of goals and means that would result in the greatest benefits and least disadvantages. Sharkansky *Public Administration* 43.

<sup>107</sup> Sharkansky *Public Administration* 42.

<sup>108</sup> See also 6 *et al Towards Holistic Governance* 26-27 on irrational behaviour and decision-making.

<sup>109</sup> Sharkansky *Public Administration* 44. Deviant behaviour by government officials must be highlighted as one of the factors that may significantly contribute to irrational administrative decision-making. Deviant behaviour consist of ritualistic attachments to formal procedures, efforts to maintain aloofness from subordinates, petty insistence on the rights associated with a certain status in the organization, insensitivity towards the needs of other officials and the public as clients, as well as resistance to change. Deviant behaviour tends to preclude open and free-flowing communication, and hence co-operation, between individual administrators and other administrative organs. This may be attributed to the notion that deviant behaviour causes stress that include, *inter alia*: personal insecurity of government officials and inability or unwillingness to accept status and power with regard to the hierarchy in the administrative system. Sharkansky *Public Administration* 51-52.

<sup>110</sup> 6 *et al Towards Holistic Governance* 42-43.

<sup>111</sup> It is suggested that although these factors are formulated in generic terms, making it applicable to almost all administrative structures and individual administrators in any country, evidence suggests that they are especially prevalent in the South African and NWP environmental governance structures.

significantly to further fragmentation and unco-operative behaviour and decision-making that does not seem to promote the actual achievement of integration of the current fragmented environmental administration system.

#### 2.4.3.4 Administrative systems in developing countries

The nature of administrative systems in developing countries, such as South Africa, may also explain current behavioural patterns of government officials. Public administration in developing countries emphasises the need for development in its broadest defined sense in order to, amongst others, alleviate poverty and improve living standards, health care, and education.<sup>112</sup> There is also a strong reliance on the public administration for leadership.<sup>113</sup> Hence, public administrators, as leaders, are responsible for rapid economic development, because they are deemed most capable to initiate and guide this development. In addition, many developing countries are characterised by political instability which may frustrate the attainment of development goals.<sup>114</sup> There are also disparities between educated and well-trained government officials and the 'less educated' public they are meant to serve.<sup>115</sup> It is argued that these characteristics, either separately or jointly, place unnecessary, additional demands and burdens on the public administration. This may widen the scope of responsibility of government officials and negatively influence performance, priorities and ultimately, attitudes.

#### 2.4.3.5 Other factors

Meijers and Stead<sup>116</sup> point out various other factors that may cause unco-operative behaviour. These include: vested interests; perceived threat or competition; disparities in staff training; perceived loss of organisational and program identity or strategic positions; perceived loss of prestige or authority; inter-professional and intra-professional differences; lack of common language; different priorities, ideologies,

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Centre for Environmental Management *Report on an Environmental Management System for the North-West Province* 368-374, and chapter 3 below.

<sup>112</sup> Sharkansky *Public Administration* 31.

<sup>113</sup> Sharkansky *Public Administration* 31.

<sup>114</sup> Sharkansky *Public Administration* 31-32.

<sup>115</sup> Sharkansky *Public Administration* 32.

<sup>116</sup> Meijers and Stead "Policy Integration" 7.

outlooks or goals; differing organisational-leader-professional socialization; and poor historical relations or image formation.

Other factors that may influence the behavioural pattern of government officials also include: the proliferation of governmental institutions, challenges with regard to recruitment and maintenance of a capable personnel corps, challenges arising from the volume and complexity of policies, legislation and accompanying structures,<sup>117</sup> vaguely defined organisational structures, and insufficient communication.<sup>118</sup>

#### *2.4.4 Benefits of addressing unco-operative administrative and organisational behaviour*

The achievement of sustainability is typically an issue that is crosscutting in terms of various policies and actors that are mandated to execute those policies. A coordinated and co-operative approach and attitude by all government officials is accordingly required to address fragmentation and to achieve sustainable service-delivery results. It has been pointed out above that unco-operative behaviour of government officials may cause further fragmentation in the environmental governance domain.<sup>119</sup> Various factors have also been discussed that may lead to unfavourable organisational behaviour of officials. The primary disadvantage posed by this type of behaviour is that sustainability may not be achieved because fragmentation is exacerbated, instead of establishing co-operation, coordination and integration of environmental governance efforts.

It is argued that the benefits posed by, *inter alia*, changing attitudes and behaviour, and creating an environment that is conducive for co-operation, coordination and integration of governance efforts, far outweigh the disadvantages. Accordingly, they should be considered as a matter of primary importance in reform endeavours proposed in this study.<sup>120</sup> These advantages include: opportunities to learn, to adapt and develop new competencies; the opportunity to gain resources, including time, money, information, legitimacy and status; the ability to share costs of associated

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<sup>117</sup> Brynard *Administrative Reform* 225.

<sup>118</sup> Gladden *Approach to Public Administration* 55-70, 101-109.

<sup>119</sup> See paragraph 3.3 below.

<sup>120</sup> See chapter 7 below.



risks; the ability to gain influence over a specific domain; the ability to manage uncertainty; the ability to solve invisible and complex problems; the ability to specialise or diversify; the ability to gain mutual support, group synergy and harmonious working relationships; and the ability to rapidly respond to changing demands from industry and the public.<sup>121</sup> Moreover, a change in organisational behaviour that is receptive for coordination, co-operation and integration, may ultimately lead to the achievement of sustainable results, especially insofar as it relates to service-delivery in the environmental governance effort.

## ***2.5 Integration and holistic governance as opposites of fragmented governance***<sup>122</sup>

The term 'fragmentation' is widely used throughout literature to indicate the current disjointed state of environmental governance efforts. This paragraph requires an investigation of the term 'integration' as the opposite of 'fragmentation'. Specific emphasis is accordingly placed on terms that denote the manner in which fragmentation may be addressed. These terms include, *inter alia*: holism, integration, co-operation, coordination, collaboration and co-existence. It is argued that these terms are sometimes used loosely and in an unconsidered fashion when referring to reforms of fragmented environmental management and governance efforts. It is proposed that a clarification of terminology may assist in better understanding the actual problems of fragmentation and the solutions discussed in this study. Subsequent paragraphs accordingly focus on the manner in which holistic governance may be achieved by way of a systematic and phased approach. Integration at policy and operational levels are also discussed.

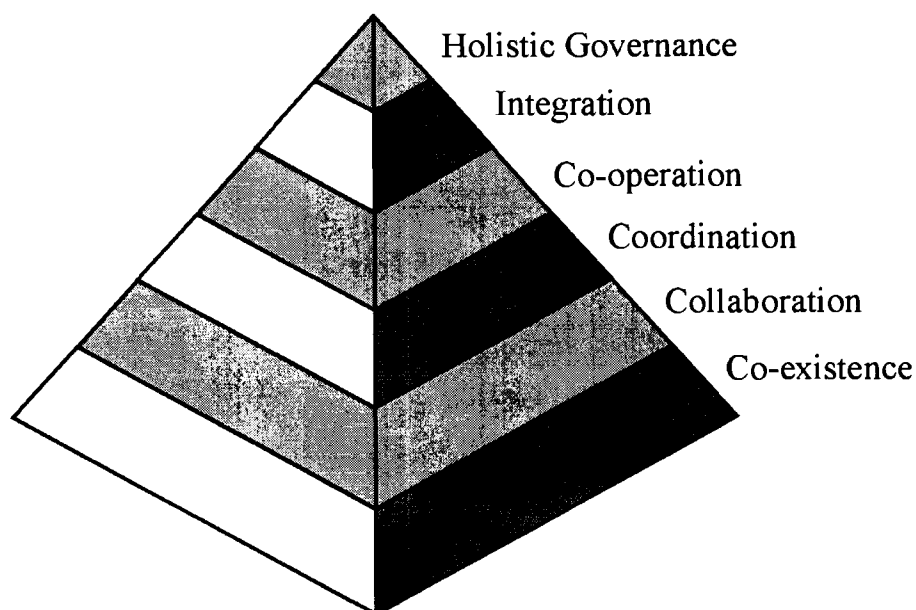
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<sup>121</sup> Meijers and Stead "Policy Integration" 9. This may be specifically relevant to the environmental discourse since the environment is, by its very nature, in a continuous state of change because of natural processes.

<sup>122</sup> The discussion in this paragraph is based on the comprehensive study on holistic governance in 6 *et al Towards Holistic Governance*. Where appropriate, modifications to the theory of holistic governance are proposed, especially insofar as it is necessitated by a view of holistic governance that best suits the South African scenario. The model that this study proposes is influenced by characteristics intrinsic to a developing country with a uniquely fragmented environmental governance system. See also in this regard the discussion in paragraph 3.3 below.

### 2.5.1 Towards the achievement of holistic governance

Fragmented governance should be understood in the context of Figure 1 below.<sup>123</sup> Figure 1 represents the different steps that need to be achieved in a gradual fashion for the eventual achievement of holistic governance.



**Figure 1: A Phased Approach for Achieving Holistic Governance**

Holistic governance arguably represents the ideal form of governance. Evidence for this may be found in past and present efforts to establish holistic governance.<sup>124</sup> Holistic governance entails a re-invention of current governance structures, policies and procedures and should be primarily focused on "...delivering integrated policies and practices delivering genuinely desirable outcomes to meet real needs".<sup>125</sup> The aim of these endeavours should be to improve the effectiveness and efficiency of service-delivery to the public through governance, in order to, *inter alia*, achieve sustainable governance results.<sup>126</sup> Holistic governance is not the mere piecing together of partial perspectives. Rather it recognises the notion that crosscutting issues, such as the achievement of sustainability, cannot be solved in isolation. It

<sup>123</sup> See also paragraphs 2.3 above and 3.2 below on fragmented governance.

<sup>124</sup> See 6 *et al Towards Holistic Governance* 9-27 for a discussion on the comprehensive undertakings to establish holistic governance in the United Kingdom.

<sup>125</sup> 6 *et al Towards Holistic Governance* 1.

<sup>126</sup> See also paragraph 2.2 above.

thereby emphasises the need for a coordinated response from various organisations.<sup>127</sup> Given the ultimate goal of holistic governance, it may be defined for the purpose of this study as:

The ideal form of governance which is established by way of collaboration, coordination, co-operation and integration of policies, regulation, service provision and scrutiny or assessment functions of co-existing governmental organs into a single system of government in order to achieve sustainable results.<sup>128</sup>

Integration, co-operation, coordination and collaboration in this context, are all methods to achieve holistic governance. Collaboration and coordination describe the situation where policies, regulation and scrutiny functions are joined-up, but not necessarily mutually reinforcing. These strategies accordingly answer the question: what can be done together?<sup>129</sup> Collaboration and coordination are furthermore respectively defined as 'to work together', and to make things, people, structures and parts function together efficiently and in an organised way.<sup>130</sup> Although these definitions describe the coherence function of collaboration and coordination, it is clear that the achievement of a common goal or objective is not included. In other words, whilst the need for coherence is highlighted by these concepts, the actual result is not provided for. For the purpose of this study, the result to be achieved is that of sustainability, especially insofar as it relates to fragmented environmental governance efforts and optimisation of service-delivery efforts.

Co-operation and integration on the other hand, ask the questions: what can be done together?; who needs to be involved?; what are the mutually reinforcing objectives?; and how should one go about to achieve these objectives? The nature of these concepts as evidenced from the questions, correlates with their definitions which explains co-operation and integration respectively as 'working together for a common purpose', and 'to combine two things in such a way that one becomes fully a part of the other', hence aiming to achieve the same goals or objectives.<sup>131</sup> 6 *et al*<sup>132</sup> make a further distinction between integration and coordination. Whilst coordination, and

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<sup>127</sup> Meijers and Stead "Policy Integration" 3, and Meijers *Integration* 12.

<sup>128</sup> As adapted from 6 *et al Towards Holistic Governance* 28-29.

<sup>129</sup> As adapted from 6 *et al Towards Holistic Governance* 32.

<sup>130</sup> Crowther (ed) *Oxford Advanced Learner's Dictionary* 219, 257.

<sup>131</sup> Crowther (ed) *Oxford Advanced Learner's Dictionary* 257, 620.

<sup>132</sup> 6 *et al Towards Holistic Governance* 33. See also the discussion on the prospects for holistic governance in 6 *et al Towards Holistic Governance* 212-242.

collaboration, as argued above, refers to the development of ideas regarding holistic governance, integration refers to the actual implementation of these collaborative and coordinated ideas into practice.

The foregoing exposition explains the hierarchy of the different phases necessary to achieve holistic governance. Co-existing governmental agencies need firstly to collaborate and coordinate their policies, regulation, service provision and scrutiny or assessment functions; before co-operation and integration may take place in an effort to achieve holistic governance.

It is argued that holistic governance is an all-encompassing term that represents the ideal form of governance since it encapsulates co-existing administrative organs in a holistic fashion by way of collaboration, coordination, co-operation, and integration. A one-stop environmental authorisation shop arguably correlates with the characteristic of holistic governance in environmental context.<sup>133</sup>

#### *2.5.2 Integration at policy level as an element of holistic governance*

Fragmentation may occur at the policy level in government.<sup>134</sup> Fragmented environmental policies may lead to unexpected and unwanted environmental consequences, or externalities, which may include unfavourable conditions at policy level for the achievement of sustainability.<sup>135</sup> This may imply that integration efforts pertaining to a wide variety of sectoral environmental policies may be critical, and even a prerequisite for sustainability.<sup>136</sup> It is thus argued that the integration of

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<sup>133</sup> See chapters 4, 5 and 6 below. In order to address the current fragmented environmental governance sphere in South Africa and the NWP, it is further argued that holistic governance, in the form of a one-stop shop, should be the ultimate aim in order to achieve sustainable results. It is argued in this context that an integrated environmental authorisation system, or a one-stop shop, that is based on holistic governance, IEM, CEG, and IPPC, may pose viable solutions for the establishment of a more integrated and co-operative environmental governance sphere in South Africa and the NWP. See paragraphs 3.4-3.6 below.

<sup>134</sup> See paragraph 2.3 above and Nel, Kotzé and Snyman "Strategies to Integrate Environmental Policy" 1-3. For a discussion on policy integration efforts in Europe, see Weale *et al Environmental Governance in Europe* 69-75.

<sup>135</sup> Meijers and Stead "Policy Integration" 1.

<sup>136</sup> Orhan "Centralised Regulation" 1, also points out in this regard that since environmental problems are related to a number of policy areas and sectors, integration of fragmented policy areas and sectors, coordination of problem-solving efforts, and co-operation of all relevant actors have been significant policy prescriptions for the solution of environmental problems. Hence, in order to achieve sustainable

various environmental policies is also an aspect that should be considered in the endeavour to establish a holistic form of environmental governance.

Policy integration, for the purpose of this study, essentially concerns:

...the management of cross-cutting issues in policy-making that transcends the boundaries of established policy fields, which often do not correspond to the institutional responsibilities of individual departments. Integrated policy-making refers to both horizontal sectoral integration (between different departments and/or professions in public authorities) and vertical inter-governmental integration in policy-making (between different tiers [sic] of government), or combination of both.<sup>137</sup>

Some related, or synonymous terms that also deal with policy integration, include: policy coherence, cross-cutting policy-making, concerted decision-making, policy consistency, holistic governance, joined-up governance, and policy coordination.<sup>138</sup> All these concepts are based on the foundations of, *inter alia*, co-operation, coordination, and integration.<sup>139</sup>

Policy co-operation refers to the instance where two or more organisations work together to accomplish their own goals, thereby aiming to establish more efficient sectoral policies.<sup>140</sup> Coordination, on the other hand, is a more formal process than policy co-operation and refers to policy consistency and policy coherence.<sup>141</sup> Policy coordination may include: consistency and coherence between various objectives and elements of a single policy or project; consistency and coherence within a set of interacting policies or projects of one or more departments or organisations; policy that is translated into a consistent and coherent set of appropriate actions within one or more departments or organisations; and service delivery practices at operational level that are consistent and coherent, thereby ensuring that a comprehensive package of

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results, a certain level of policy integration is required. See also Russel "The Environment Test and Policy Integration" 2.

<sup>137</sup> Meijers and Stead "Policy Integration" 2, and Stead and Meijers "Integrating Transport, Land-use Planning and Environmental Policies" 3. See also Russel "The Environment Test and Policy Integration" 3, for a further discussion on the concept of environmental policy integration.

<sup>138</sup> Meijers and Stead "Policy Integration" 1-2, and Stead and Meijers "Integrating Transport, Land-use Planning and Environmental Policies" 3.

<sup>139</sup> Meijers and Stead "Policy Integration" 1.

<sup>140</sup> Meijers and Stead "Policy Integration" 5.

<sup>141</sup> Meijers and Stead "Policy Integration" 5, and Luken and Hesp "Efforts to Achieve Policy Integration" 2-3.

options and solutions is available to people with specific needs.<sup>142</sup> One of the primary aims of policy coordination is the establishment of adjusted and more efficient sectoral policies.<sup>143</sup>

Policy integration is a process which is based on policy co-operation and coordination. Its principal objective is to establish a single and joint policy for all the various sectors involved.<sup>144</sup> Policy integration differs from policy co-operation and coordination in the sense that it requires more interaction, accessibility and compatibility; that it leads to more inter-dependence; that it needs more formal institutional arrangements; that it involves more resources; that it requires stakeholders to surrender more autonomy; and that it is more comprehensive in terms of time, space and actors.<sup>145</sup> It is argued that policy integration efforts may be a prerequisite for the achievement of a holistic or integrated form of environmental governance. It is further argued, in this context, that integration may be achieved by way of integrated laws as a means to establish policy integration.<sup>146</sup> This may be achieved by way of single framework law that establishes an institutional framework for all, or most forms of environmental governance and management efforts.<sup>147</sup>

### *2.5.3 Integration at operational level as an element of holistic governance*

Fragmentation may occur at both policy and operational levels.<sup>148</sup> One of the methods to address fragmentation at operational level is integration of environmental authorisation processes.<sup>149</sup>

An environmental authorisation is arguably one of the most popular 'command and control' tool in terms of environmental governance efforts.<sup>150</sup> 'Command and control'

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<sup>142</sup> Meijers and Stead "Policy Integration" 3, and Luken and Hesp "Efforts to Achieve Policy Integration" 3.

<sup>143</sup> Meijers and Stead "Policy Integration" 5.

<sup>144</sup> Meijers and Stead "Policy Integration" 5, 12, Stead and Meijers "Integrating Transport, Land-use Planning and Environmental Policies" 3, and Luken and Hesp "Efforts to Achieve Policy Integration" 2-3.

<sup>145</sup> Meijers and Stead "Policy Integration" 6.

<sup>146</sup> McLoughlin and Bellinger *Environmental Pollution Control* 35-36.

<sup>147</sup> McLoughlin and Bellinger *Environmental Pollution Control* 36-37.

<sup>148</sup> See paragraph 2.3 above.

<sup>149</sup> See paragraph 2.6-2.8 below and chapters 4-6 below. See also Nel, Kotzé and Snyman "Strategies to Integrate Environmental Policy" 1-2, 10-18.

<sup>150</sup> See paragraph 2.8 below.

regulation is one of the most widely used techniques for the application of law to environmental problems. It primarily consists of standards for polluting or damaging activities, and enforcement of these standards by environmental regulators, or authorities.<sup>151</sup> The regulatory process suggested by the 'command and control' approach may be divided into three stages namely: the setting of general policy; the setting of ambient targets and national waste or energy reduction targets; and the setting of mandatory individual plant pollution standards, company waste or energy reduction targets and product standards.<sup>152</sup> In this context, authorisations are an essential part of regulatory environmental law. They establish substantive requirements, to be observed by potential polluting actors.<sup>153</sup> Whilst environmental administrators are required to control polluting actors' activities by way of, *inter alia*, authorisations, the actors themselves have to comply with authorisation conditions.<sup>154</sup> Non-compliance with authorisation conditions, or operating without a relevant authorisation, may amount to, amongst others, criminal and civil liability.<sup>155</sup>

Environmental authorisations still remain one of the most popular policy instruments used by environmental authorities in South Africa.<sup>156</sup> The same is true for the EU.<sup>157</sup> Authorisations are one of the main instruments to achieve the objectives of especially IPPC, and are currently one of the most commonly used policy instruments in the realm of EU environmental governance efforts.<sup>158</sup> Scott<sup>159</sup> states that even though the EU progressively commits itself to broaden its use of environmental policy instruments, practice shows that regulation is still mainly by way of traditional 'command and control' tools such as authorisations.<sup>160</sup> Although the EU committed

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<sup>151</sup> Wilkinson *Environment and Law* 134-135, and Kiss and Shelton *International Environmental Law* 211-213.

<sup>152</sup> Hilson *Regulating Pollution* 101-102, paragraph 2.8, and chapters 4-6 below.

<sup>153</sup> Winter *The IPPC Directive: a German Point of View* 65.

<sup>154</sup> Winter *The IPPC Directive: a German Point of View* 66.

<sup>155</sup> See also paragraph 2.8 and chapters 4-6 below.

<sup>156</sup> Nel, Kotzé and Snyman "Strategies to Integrate Environmental Policy" 1-2.

<sup>157</sup> See chapters 4-6 below.

<sup>158</sup> Scott *EC Environmental Law* 24, Hilson *Regulating Pollution* 101, and Kiss and Shelton *International Environmental Law* 211-213. See also chapters 4-6 below. Krämer *EC Environmental Law* 47 notes that the word 'permit' is sometimes used interchangeably with 'authorisation'. He proposes that a permit, in the context of EU law, has the same meaning as an authorisation and that there is accordingly no legal difference between the two words. The term 'authorisation' is employed for the purpose of this study, because it arguably encapsulates all certificates, licences, authorisations and permits that a developer needs before commencing an activity that may have a detrimental effect on the environment. See paragraph 1.1 above.

<sup>159</sup> Scott *EC Environmental Law* 24.

<sup>160</sup> See also paragraph 2.8 and chapters 4-6 below.

itself in the *Fifth Environmental Action Programme*<sup>161</sup> to broaden the scope of policy instruments for environmental protection, reality shows an 'unadventurous' approach, which is still largely confined to the employment of 'command and control' tools.<sup>162</sup>

This situation is equally true with regard to the IPPC Directive, which depends significantly on environmental authorisations to achieve integrated and sustainable results.<sup>163</sup> Dutch and Finnish environmental policy instruments also follow the 'command and control' approach.<sup>164</sup> The high level of environmental protection in both these countries is largely attributed to the favoured approach of using authorisations in domestic environmental law and policy.<sup>165</sup> In concurrence with other Member States, these countries seem to be in favour of environmental policy instruments which are based on legally binding standards to prohibit, constrain and direct the conduct of activities within the territory of the state.<sup>166</sup> This reality comes amidst increased criticism of the use of 'command and control' tools, which have been described as projecting the "...impression of a draconian bureaucracy coercing powerless firms and consumers".<sup>167</sup> In addition, further criticism expresses the view that 'command and control' tools are not recognising the economic rationale underlying current trends based upon economic incentives.<sup>168</sup> Simply put, 'command and control' tools may not be cost-effective, since it fail to minimise costs related to

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<sup>161</sup> *Fifth Environmental Action Programme: Towards Sustainability – A European Community Programme of Policy and Action in Relation to the Environment and Sustainable Development* OJ 1993 C138/5. For a comprehensive discussion of the environmental programmes of the EU, see Weale *et al* *Environmental Governance in Europe* 56-75.

<sup>162</sup> Scott *EC Environmental Law* 24, and Faure and Lefevre 1996 *European Environmental Law Review* 119.

<sup>163</sup> Winter *The IPPC Directive: a German Point of View* 65, Hilson *Regulating Pollution* 101-102 and Jans *Relationship between the IPPC Directive and other EC Environmental Law* 45. Hilson *Regulating Pollution* 117 furthermore states that 'command and control' regulation in terms of IPPC and the IPPC Directive is mainly a process-based approach.

<sup>164</sup> See chapters 5 and 6 below.

<sup>165</sup> Interview Hollo E, Professor of Law, University of Helsinki and Sahivirta E Senior Environmental Law Expert, Finnish Environment Institute.

<sup>166</sup> Scott *EC Environmental Law* 24.

<sup>167</sup> Jacobs *The Green Economy* 151. See also for a detailed exposition on existing criticism against 'command and control' tools Scott *EC Environmental Law* 29-37, Faure and Lefevre 1996 *European Environmental Law Review* 118-119, and Wolf and Stanley *Environmental Law* 16-17.

<sup>168</sup> Scott *EC Environmental Law* 29. Hilson *Regulating Pollution* 116-117 also adds that the 'command and control' approach presents further challenges since it may be difficult to establish equal and fair treatment for industrial installations that may differ in terms of size, scope of activities, and more importantly, extent of pollution activities.



the achievement of environmental protection objectives.<sup>169</sup> Much of this criticism may however be addressed if environmental authorisations are utilised on the basis of an integrated framework, such as, for example, the framework provided for by the IPPC Directive.<sup>170</sup> Environmental authorisations that are based on an integrated premise and framework, may accordingly be used effectively as tools to achieve integration at operational level.<sup>171</sup>

In light of the foregoing, it is clear that authorisations, as 'command and control' tools, are well established and favoured in South African and EU environmental governance regimes. It seems that their benefits outweigh their evident drawbacks. They promote strictly controlled and efficient environmental protection and are, accordingly, a convincing impetus to be utilised now and in future. It is suggested that an integrated environmental authorisation system may constitute a useful mechanism to address fragmentation at operational level, which may arguably lead to sustainable governance results.

## **2.6 Integrated environmental management**

IEM is another mechanism that may serve as a useful foundation for the integration of environmental governance efforts in South Africa and the NWP. The concept of IEM is however not always clearly understood, especially insofar as it relates to the practical implementation thereof by environmental governance bodies.<sup>172</sup> Subsequent paragraphs endeavour to give a definition of IEM in South African context; to discuss the components of IEM, namely that of 'integration', 'environment' and 'management'; and to investigate the relevance of IEM as a mechanism to address fragmentation.

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<sup>169</sup> The reason for this is because of the tendency of 'command and control' tools to prescribe excessively, whilst at the same time aiming to promote uniformity, no matter what the financial implications. Scott *EC Environmental Law* 29.

<sup>170</sup> See chapter 4 below for a detailed discussion.

<sup>171</sup> See chapters 4-6 below for a discussion on how fragmentation at operational level is addressed in the EU in general, and in the Netherlands and Finland in particular.

<sup>172</sup> Centre for Environmental Management *Report on an Environmental Management System for the North-West Province* 39.

### 2.6.1 IEM defined

Environmental management may be defined as management skills and techniques implemented to achieve the principles of sustainability at all levels, including the macro level (governments), and the micro level (private sector).<sup>173</sup> These principles include, *inter alia*: the precautionary approach, the polluter pays principle, the cradle-to-grave principle, the principle of an integrated and holistic approach, the principle that due consideration must be given to all alternatives, and the principles of continuous improvement, accountability and liability, and transparency and democracy.<sup>174</sup> IEM necessitates planned controls to ultimately achieve a desired outcome. The execution of planned controls is commonly referred to as 'management' in its broadest possible sense.<sup>175</sup> When planned controls are applied to aspects directly or indirectly relating to the environment, one arguably deals with environmental management.

It is important to note that environmental management is not 'management of the environment'. Environmental management is rather "...management of activities within tolerable constraints imposed by the environment itself, and with full consideration of ecological factors".<sup>176</sup> Hence, environmental management is the management of the activities of people in the environment and management of resultant effects of these activities on the environment. This view is supported by Bosman,<sup>177</sup> who states that "...environmental management should not be confused with the management (manipulation) of the natural environment (nature conservation and the management of plants and animals), but must be seen as the management of the activities of people within the carrying capacity of environmental systems". This reflects the notion that IEM should guide the activities of people through governance, with the involvement of civil society and industry to achieve a desired objective, namely that of sustainability.<sup>178</sup> In light of the foregoing, it is evident that environmental management functions at governance and corporate levels, and that the

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<sup>173</sup> Bosman *Waste Disposal or Discharge* 123, and paragraph 3.5 below.

<sup>174</sup> See paragraph 2.2 above for a discussion.

<sup>175</sup> Fuggle *Environmental Management* 3.

<sup>176</sup> Beale *The Manager and the Environment* 20.

<sup>177</sup> Bosman *Waste Disposal or Discharge* 10.

<sup>178</sup> See paragraph 2.2 above.

ultimate objective is the achievement of the principles of sustainability.<sup>179</sup> Since this research focuses on proposals for the integration of the current fragmented environmental governance effort in South Africa and the NWP, IEM in terms of only the governance sphere is investigated. This study accordingly focuses on the alignment of the different spheres of government and the various line functionaries in each sphere that are tasked to govern the behaviour of people in order to achieve sustainability. One may thus rather refer to integrated environmental governance than IEM.<sup>180</sup> Integrated environmental governance, or management, means the optimal alignment of the current disjointed and fragmented tools, instruments, processes, structures and procedures to govern development from an environmental perspective in a sustainable fashion.<sup>181</sup> For the sake of uniformity and clarity, the term IEM, albeit with the meaning attributed thereto above, is employed for the remainder of this thesis.

The foregoing discussion focused primarily on what IEM is not. In light of this discussion, this study proposes that IEM is rather:

The management of the activities of people at micro and macro level to ensure achievement of the principles of sustainability, notably to ensure the utilisation of natural resources provided by all environmental media within their carrying capacities, while promoting economic growth as primary objective, by ensuring the implementation of decision-making and management tools for environmental management; based on the Deming-management approach, for the different phases of the project life-cycle through the integration of the activities between the different spheres of government; and within their various line functions.<sup>182</sup>

## 2.6.2 *Integration in terms of IEM*

Integration is one of the fundamental aspects of IEM. The question on what should be integrated in terms of IEM accordingly requires further exploration. It is argued in this study that integration primarily includes the inter-relationship between the

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<sup>179</sup> Bosman *Waste Disposal or Discharge* 10.

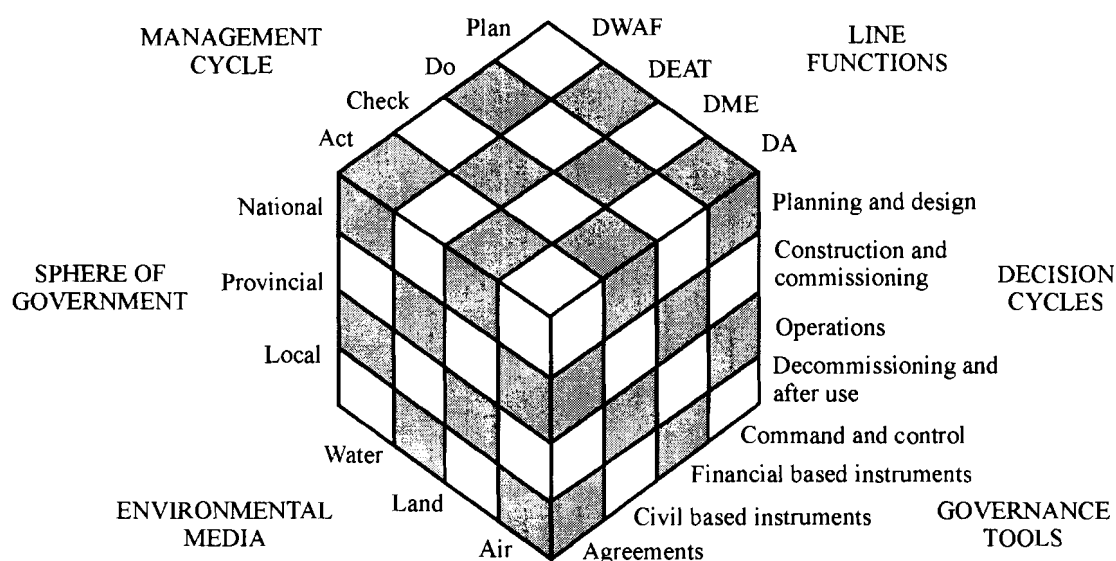
<sup>180</sup> Nel and Du Plessis 2004 *SA Public Law* 183-184, and Centre for Environmental Management *Report on an Environmental Management System for the North-West Province* 39.

<sup>181</sup> Nel and Du Plessis 2004 *SA Public Law* 183-184, and Centre for Environmental Management *Report on an Environmental Management System for the North-West Province* 39. IEM at governance level actually means the management of environmental impacts generated by the delivery of an organ of state's activities, products and services as it executes its duties of environmental governance, and may include fleet management, procurement strategies and resource consumption.

<sup>182</sup> See also paragraph 3.5 below.

different spheres of government, environmental media (land, air and water), different line functionaries of government, the Deming-management approach, decision cycles, and different tools for environmental management.<sup>183</sup>

Figure 2 represents an integrated model that illustrates the six different components of IEM that should be integrated.<sup>184</sup>



**Figure 2: A Comprehensive IEM Model**

Integration of these various aspects may be explained as follows. The South African government consist of national, provincial and local spheres.<sup>185</sup> Each sphere in turn, consists of various line functionaries or departments. Environmental line functionaries include, but is not limited to, the DEAT, DWAF, DME, the South African Heritage Resource Agency (hereafter SAHRA); and the Department of Development, Local Government, and Housing (hereafter DDLGH). Some of these line functionaries are also represented at provincial and local level.<sup>186</sup> Integration of the various spheres and line functionaries of government may contribute to the alignment of environmental governance efforts. Alignment in this context arguably

<sup>183</sup> Nel and Du Plessis 2004 *SA Public Law* 189-190.

<sup>184</sup> This model was developed by Nel JG, Centre for Environmental Management, North-West University, Potchefstroom Campus. See also in this regard Nel and Du Plessis 2004 *SA Public Law* 189.

<sup>185</sup> Section 40(1) of the 1996 Constitution.

<sup>186</sup> Glazewski *Environmental Law* 130-132, and Glazewski *Environmental Law in South Africa* 107-108.

refers to uniform institutional policy, project and decision processes and structures relating to environmental governance tasks.<sup>187</sup>

The traditional Deming-management approach is an outcomes based management approach that is based on the process of continual improvement. It encompasses four actions that must be performed during the process of executing of planned controls.<sup>188</sup> These include planning, doing, checking and acting (hereafter PDCA) in this sequence.<sup>189</sup> The project life-cycle is a further important element that needs to be integrated, and it strongly correlates with the Deming-management approach. The project life-cycle is specifically applicable to certain projects, be it projects initiated by government, or by industry. It includes certain phases, namely planning and design, construction and decommissioning, the operational phase, and the decommissioning phase.<sup>190</sup>

Various tools are available for IEM. These tools include, amongst others, 'command and control' tools, fiscal based tools, civil based tools, and agreements.<sup>191</sup> For the purpose of this study, it is especially important that environmental authorisations, as 'command and control' tools, be integrated in environmental management and governance efforts.<sup>192</sup>

The environment furthermore consists of different media including: air, land and water. The necessity for integrating the various environmental media is evident from the holistic approach of IEM and the integrated, holistic and inter-related nature of the environment as defined by the NEMA.<sup>193</sup> IEM should not be aimed at shifting pollutants from different environmental media, but rather to address pollutants in an

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<sup>187</sup> Nel and Du Plessis "Unpacking Integrated Environmental Management" 89.

<sup>188</sup> Kreitner and Kinicki *Organizational Behavior* 16.

<sup>189</sup> See Later *Vergunning op Hoofdzaken* 29, and Global Environmental Management Initiative *Total Quality Environmental Management* 7-8, for a more detailed discussion on the Deming-management cycle.

<sup>190</sup> Centre for Environmental Management *Report on an Environmental Management System for the North-West Province* 64-65.

<sup>191</sup> Centre for Environmental Management *Report on an Environmental Management System for the North-West Province* 64-65. See also Nel and Du Plessis 2001 *South African Journal of Environmental Law and Policy* 13-19 for a discussion on the various tools available for IEM.

<sup>192</sup> The focus of this study is on 'command and control' tools in the form of authorisations. See paragraph 1.1 above.

<sup>193</sup> See paragraph 2.6.3 below.

integrated way according to the tolerable constraints of the environment, and within the carrying capacity of natural systems.<sup>194</sup>

The integration of the six components discussed above should be viewed in the context of IEM and its relation to the project life-cycle. The project life-cycle is divided into a planning and design component, and an implementation, or operational component, and each of these components have distinct phases with different implications in terms of their environmental impact.<sup>195</sup> Whilst environmental impact assessment (hereafter EIA) is only applicable to the planning and design component, IEM is applicable to the whole of the project life-cycle, including the implementation or operational component. In terms of the project life-cycle, it may also be derived that EIA is in fact a part of the IEM process and may therefore not be used as a synonymous term with regard to IEM.<sup>196</sup> IEM tools, such as environmental authorisations in the form of, *inter alia*, water use licences, waste disposal permits, and registration certificates, are typically used during the implementation component of the project life-cycle. It is specifically during the operational phase of the project life-cycle that government, including all three spheres and all relevant line functionaries in each sphere, will become involved in IEM, since environmental governance may be executed by way of, *inter alia*, regulation through tools such as environmental authorisations. It is accordingly necessary that aligned governance efforts through integrated structures, processes and tools be established in order to achieve sustainable results.

It may be derived from the foregoing that 'integration' in terms of IEM includes: integration, or alignment of authorisation arrangements between the various spheres of government; integration or alignment of authorisation arrangements within the same sphere of government, but between various line functions; recognition of the integrated nature of the environmental management cycle to include all PDCA elements of the Deming-management approach; recognition of the need to address all the phases of a project or development cycle, from planning and design through authorisation, to construction and use, including post-authorisation follow-up and

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<sup>194</sup> See paragraph 2.8 and chapters 4-6 below.

<sup>195</sup> Centre for Environmental Management *Report on an Environmental Management System for the North-West Province* 64-65.

<sup>196</sup> See also paragraph 3.5 below.

verification of conformance to authorisation conditions by competent authorities; integrated use of various environmental governance tools and implementation strategies, including command and control, fiscal, and civil instruments, as well as agreements to ensure sustainable governance efforts; recognition of the human-environment system as a closed system that requires an integrated perspective on the various environmental media in order to prevent intra-media transfer of impacts; alignment of governance policies and strategies across the various spheres and autonomous line functions; alignment of administrative practices, procedures and instrumentation of separate, autonomous line functions of all spheres and line functions to achieve effective and integrated service-delivery efforts; integration between the various spheres and line functionaries of government; integration of the environmental management cycle; and integration of decision-making cycles in the environmental management process.<sup>197</sup>

CEG mirrors a number of the objectives proposed by IEM. It is accordingly another strategy which may be employed to achieve integration, and is discussed hereafter.

## **2.7 *Co-operative environmental governance***

### **2.7.1 *Co-operative governance defined***

Co-operative governance is provided for in chapter 3 of the 1996 Constitution as well as in various provisions of the NEMA and other sectoral environmental legislation,<sup>198</sup> and is applicable to all environmental governance bodies at national, provincial and local sphere, as well as to all line functionaries in each sphere.<sup>199</sup> In more general terms:

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<sup>197</sup> Centre for Environmental Management *Report on an Environmental Management System for the North-West Province* 65.

<sup>198</sup> See chapter 3 below for a comprehensive discussion.

<sup>199</sup> Bray 2005 *Journal of Contemporary Roman-Dutch Law* 359, states that issues relating to governance are receiving increased attention in South Africa. The author opines that the most significant reference to governance in South Africa, is arguably found in chapter 3 of the 1996 Constitution.

...the obligations towards cooperative government [sic] reconcile the notion of independent spheres with the interdependence between these spheres necessary to ensure the success of the national development project.<sup>200</sup>

Co-operative governance is thus a new approach to governance that shifts from a narrow concern with government to a wide range of governance mechanisms. It is primarily concerned with the growing role of associations, and different agencies and partnerships, that reflects the dynamic and interactive nature of coordination.

Co-operative governance includes, amongst others: coordination of activities to avoid competition and duplication; development of a multi-sectoral perspective on the interests of all South Africans; effective dispute resolution; collective harnessing of public resources by way of coordination and support; and a clear division of roles and responsibilities so as to minimise confusion and maximise effectiveness, and ultimately improve service-delivery through governance efforts.<sup>201</sup>

The emphasis of co-operative governance is on co-operation in order to address, *inter alia*, organisational behaviour by government officials that contributes to fragmentation of the environmental governance effort.<sup>202</sup> Subsequent paragraphs draw a link between co-operative governance, IEM and CEG.

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<sup>200</sup> Besdziek *Provincial Government* 192.

<sup>201</sup> Criticism on the effectiveness of environmental law in South Africa not so much focuses on the content and quality of laws, as on the lack of adequate enforcement of the current environmental law regime. The administration of environmental law, development of environmental law, and the improvement in the quality of its enforcement by government, are generally regarded as the main reasons for the ineffectiveness of the constitutionally entrenched right contained in section 24 of the 1996 Constitution and legislative provisions incidental thereto. De Waal *et al Bill of Rights Handbook* 402. This criticism also relates to the existence of fragmentation and lack of co-operation, which is ubiquitous in the current fragmented environmental governance dispensation. It should also be noted in this regard that the imperative for coordination and integration in government is not a new phenomenon. The achievement of holistic governance and coordination across the organisational instruments of government is described as the eternal challenge in governance, hence rendering it not only a domestic concern, but also an on-going global challenge. See 6 *et al Towards Holistic Governance* 9.

<sup>202</sup> See paragraphs 2.4 above and 3.3 below. It is also argued that co-operative governance may be employed, together with holistic governance, IEM and IPPC, to address fragmentation in terms of the structures, procedures, processes and governance tools that government uses to execute environmental governance.



### 2.7.2 Defining CEG

Since the duty to govern is mandated by law, governance should arguably be aimed at regulating society in a coherent, orderly and structured manner, in order to satisfy the interests and fulfil the needs of all people.<sup>203</sup> Chapter 1 above explored in some detail the duty on government as a whole to execute certain obligations provided by section 24 of the 1996 Constitution.<sup>204</sup> The wording of section 24 suggests that it may be construed as a traditional, positively formulated fundamental right, as well as a socio-economic right that imposes duties on the state to protect the environment for present and future generations through reasonable legislative and other measures.<sup>205</sup> Government may also realise the objectives of section 24, *inter alia*, by way of governance.<sup>206</sup> Governance may be defined as "...being both the process and structure by which officials are held accountable for executing the fiduciary duty with

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<sup>203</sup> See for example sections 19, 41(1) and chapters 1 and 2 of the 1996 Constitution.

<sup>204</sup> These obligations include, *inter alia*: prevention of pollution and ecological degradation, promotion of conservation and securing of ecologically sustainable development as well as the exploitation of natural resources while at the same time promoting justifiable economic and social development. See section 24(b) of the 1996 Constitution. See also paragraph 1.1 above.

<sup>205</sup> Glazewski *Environmental Law* 85, Glazewski *Environmental Law in South Africa* 72, Glazewski *Environment* 413, Van Reenen 1997 *South African Journal of Environmental Law and Policy* 273-274, and Loots 1997 *South African Journal of Environmental Law and Policy* 61-64. See also paragraph 1.1 above. The wording of section 24(b) of the 1996 Constitution suggests that section 24 contains directive principles, which resemble the character of an individual, socio-economic right that imposes duties on government to protect the environment for present and future generations. This right is not a positive right of indeterminate extent, but is rather based on the notion that section 24 implies the adherence to, and achievement of, a certain minimum standard which should be attained by the execution of governmental duties contained in section 24. See in this regard Glazewski 1993 *Journal of African Law* 177, 180. Section 24(b) further implies that individuals are granted a justiciable right because the state is prevented from employing measures, which may be considered retrogressive or harmful in respect of environmental protection. See in this regard De Waal, Currie and Erasmus *The Bill of Rights Handbook* 403. Section 29 of the *Constitution of the Republic of South Africa* 200 of 1993 (hereafter the Interim Constitution), only provide that every person shall have the right to an environment which is not detrimental to his or her well-being. Kidd *Environmental Law* 36 proposes that this right is formulated in such a way that it confers an individual rather than a collective right. Also noteworthy is that the right contained in section 29, is formulated in the negative, which according to Kidd, may imply that no duties are created to protect the environment. This study concurs with Kidd in part, but proposes additionally that, seen against the objectives of the Interim Constitution as a whole, the negatively formulated right rather sets a minimum standard to which the state has to adhere in its attempts to protect the environment.

<sup>206</sup> The term 'governance' should be distinguished from 'government'. Whilst government refers to, *inter alia*, the state, the state regime, and authoritative direction and control, governance is rather the "...interaction between the formal institutions and those in civil society. Governance refers to a process whereby elements in society wield power, authority and influence and enact policies and decisions concerning public life and social upliftment". See Global Development Research Centre 2003 HYPERLINK <http://www.gdrc.org/u-gov/governance-understanding.html> 14 June 2004.

which they are entrusted to the public".<sup>207</sup> Governance, in other words, refers to the structures of rule making, rule application and rule adjudication in a given society.<sup>208</sup>

Governance may also be directed at the regulation of peoples' activities within the environment.<sup>209</sup> This is done by way of environmental governance which is defined as "...the collection of legislative, executive and administrative functions, processes and instruments used by any organ of state [and the private sector] to ensure sustainable behaviour by all as far as governance of activities, products services, processes and tools are concerned".<sup>210</sup> Hence, environmental governance encapsulates the regulatory functions of environmental governance bodies, because it implies an endeavour to govern behaviour by setting rules, standards and principles by means of legislation, administrative and executive functions, as well as processes and instruments.<sup>211</sup>

The very fact that different organs of state are sometimes required to co-operate on certain matters during governance activities, necessitates co-operative governance.<sup>212</sup>

This necessarily acknowledges the existence of inter-governmental relations. These

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<sup>207</sup> Turton "The Challenges of Developing Policy" 6. Governance is a term with many interpretations. Whilst it is sometimes equated with government and democracy, governance rather implies the structures and processes for determining use of available resources for the public good. See Bulman "Instant Governance" 29. Governance may further be facilitated by way of governance tools that include: policies, strategies, guidelines, procedures, legislation, regulations and by-laws. See Hatting *et al* "Obstacles to Successful Implementation of Governance Tools" 128, and De Villiers *Governmental Institutions* 86. This study argues that environmental authorisations are also tools through which environmental governance may be executed. See paragraphs 1.1 and 2.5.3 above.

<sup>208</sup> Hatting *et al* "Obstacles to Successful Implementation of Governance Tools" 131.

<sup>209</sup> In this sense, co-operative governance mirrors the objectives of IEM, since both concepts are directed at, amongst others, the regulation or management of the activities of people in the environment. See paragraph 2.6 above.

<sup>210</sup> Nel and Du Plessis 2004 *SA Public Law* 183.

<sup>211</sup> Birnie *International Environmental Law* 52. Normal governmental functions will also be applicable in environmental context. For a comprehensive discussion on the role of government and instruments available to execute governance, see Hughes *Public Management and Administration* 81-108.

<sup>212</sup> Not all governmental functions are exercised by one single organ of state, because 'environment' is specifically designated in section 104 and Schedule 4 of the 1996 Constitution as a matter of concurrent national and provincial competence. In addition, chapter 3 of the 1996 Constitution provides for national, provincial and local spheres of government, which are required to perform different functions unique to that sphere of government. It is noted in this regard that these provisions may in some way also contribute to the existence of fragmentation, since it provide for environmental governance to be executed by not a single, but actually more than one sphere of government. This corresponds with the existing decentralised environmental governance structure in South Africa, where the DEAT performs an advisory and guiding role with regard to the various different line functionaries. This may contribute to vertical and horizontal fragmentation in the environmental governance structure. See in this regard Bosman, Kotzé and Du Plessis 2004 *SA Public Law* 411-421, and paragraph 3.2.3 below.

relations manifest in a vertical and horizontal sense. Whilst the vertical relationship mainly refers to provision of financial and other aid, the horizontal relationship may be described as a 'compact' that permits the:

...joint administration of public services; agreements to share information or technical assistance; reciprocal legislation that permits the citizens of one jurisdiction to receive certain services within another jurisdiction [and legislation that permits administrative organs to render certain administrative services in another jurisdiction]; and the membership of governmental officials in organizations that seek to develop solutions for common problems.<sup>213</sup>

This is also true for environmental governance in South Africa. Whilst the national sphere of government is responsible for the allocation of funds to the other spheres of government and other line functionaries, the vertical and horizontal relationship within the environmental governance structure emphasises that various organs and officials will necessarily be dependent on one another. It is also common that legislative and jurisdictional boundaries overlap which necessitates co-operation in order to attain common objectives.<sup>214</sup>

It is argued, in addition, that because the environment is a holistic, integrated and inter-related phenomenon that is not confined by boundaries, problems that may occur with regard to the environment may require solutions, and hence co-operation in problem-solving strategies, from all spheres and line functionaries of government that may be involved with a particular environmental problem.<sup>215</sup> It is furthermore argued that inter-governmental relationships imply co-operative governance, or formulated differently, for inter-governmental relations to be successful, co-operative governance, is a *sine qua non*. The impetus for co-operative governance in the above context may therefore be summarised as including: the desire to create an agreeable and convenient work environment for government officials; concern that programs of other administrative organs may affect in-house programmes; the desire to support own projects that are funded by other administrative organs; the desire to protect the interests of the public from possible effects of programmes initiated by other organs; and the desire to build rapport with other administrative organs.<sup>216</sup>

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<sup>213</sup> Sharkansky *Public Administration* 292.

<sup>214</sup> See chapter 3 below.

<sup>215</sup> See paragraph 2.6.3 above.

<sup>216</sup> Sharkansky *Public Administration* 306, and May *et al Management and Governance* 3-7.

The significance of co-operative governance for environmental matters is also evident from the fact that the most obvious feature of potential environmental impacts and pollution problems, are that they affect both public health and resources, which are public goods.<sup>217</sup> The implication is that the control of potential impacts on humans and the environment is a regulatory function, since society must be protected from pollution by government action.<sup>218</sup> Because of vertical and horizontal fragmentation, as well as the necessity for co-operation between organs of state in their inter-relationship with one another, co-operative governance also becomes relevant in the context of environmental governance. Emphasis should therefore be placed on environmental governance that is based on participation and co-operation in mutual and reciprocal relationships between all government departments and spheres of government involved with environmental governance. Put differently, for environmental governance to be effective, it is essential that joined-up, holistic, coordinated, integrated, or co-operative governance should be the ultimate reform goal in relation to fragmented governance efforts.<sup>219</sup> Moreover, an aligned and integrated authorisation system, in this context, arguably represents a form of co-operative governance since the authorisation process is fundamentally an administrative process which, in order to be conducted efficiently and in conformity with constitutional obligations and other legislative provisions, is dependent on co-operative governance.<sup>220</sup>

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<sup>217</sup> Smith *Integrated Pollution Control* 6-7, Hughes *Public Management and Administration* 97-98, 103 and Bosman "From Confrontation to Co-operation" 20.

<sup>218</sup> Smith *Integrated Pollution Control* 6-7, and Bosman "From Confrontation to Co-operation" 21. 6 *et al Towards Holistic Governance* 26 also acknowledge the fact that government has a positive, albeit limited in some instances, role to play in addressing the interests of society at large through governance. It is specifically stated that the reason for this is that "...society's problems are not simply conditions to be lived with". Society's problems and interests are rather the main impetus behind governance.

<sup>219</sup> 6 *et al Towards Holistic Governance* 9. See also paragraph 2.5 above.

<sup>220</sup> See chapter 3 below for a comprehensive discussion.

CEG is a relatively novel concept in South African environmental law.<sup>221</sup> Few definitions thereof, at least from an academic point of view, exist. CEG has been defined as meaning, *inter alia*, "...the evolution of devolved governance, involving discussions, agreements and a combination of formal and informal regulation between industry, the public/stakeholders and government departments".<sup>222</sup> It is therefore aimed at the promotion of integrated service delivery and stakeholder involvement by government departments and all other interested and affected parties involved with the environment. In the above context, CEG arguably does not only refer to co-operation between the various spheres of government in the execution of their duties. The ambit of CEG is far greater than the aforementioned and could be based on the model of IEM.<sup>223</sup> It encompasses co-operation and coordination between the different spheres of government, at international and inter-regional level, as well as on an intra-governmental level.<sup>224</sup> It furthermore refers to the alignment of policies, plans and programmes across the different spheres of government and the different line functionaries within each sphere.<sup>225</sup> It also entails procedures and processes for the empowerment of civil society and industry to actively engage in environmental governance.<sup>226</sup> The foregoing describes an interactive and all-inclusive process that should ultimately enable co-operation and exchange of information between stakeholders, better decision-making, and the achievement of more outcomes that are acceptable for all.<sup>227</sup> CEG should also be based on the basic values and principles

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<sup>221</sup> For governance, or environmental governance in this instance, to be effective, a number of legislative provisions provide for co-operative governance. The provisions on co-operative governance are significant because they arguably recognise the fragmented nature of the South African environmental governance structure. They moreover acknowledge that governance is based on inter-governmental relations which must be effected by way of vertical and horizontal co-operation. Sharkansky *Public Administration* 273. The objectives of these provisions are arguably to foster consultative, public participatory, open, administratively just, democratic, and accountable governance. In light of the foregoing, it may be deduced that co-operative governance is also applicable to environmental governance authorities. Co-operative governance in terms of the environment may thus be referred to as CEG.

<sup>222</sup> Boer, O' Beirne and Greyling "The Quest for Co-operative Environmental Governance" 10.

<sup>223</sup> CEG includes not only the narrowly defined concept of governance that refers to mechanisms and relations between state departments. The concept is much broader and also includes the public sector, private sector, and all stakeholders that may be directly or indirectly involved with the environment. Boer, O' Beirne and Greyling "The Quest for Co-operative Environmental Governance" 9.

<sup>224</sup> Nel and Du Plessis 2001 *South African Journal of Environmental Law and Policy* 8.

<sup>225</sup> Nel and Du Plessis 2001 *South African Journal of Environmental Law and Policy* 8.

<sup>226</sup> Nel and Du Plessis 2001 *South African Journal of Environmental Law and Policy* 8.

<sup>227</sup> Bulman "Instant Governance" 36. It is furthermore stated in this regard that CEG entails sharing of information and setting up structures to coordinate initiatives where various groups are involved in the same focus area or resource. See Custers and Custers "Cooperative Governance and Strategic Environmental Assessment" 54.

governing public administration provided for in Chapter 10 of the 1996 Constitution.<sup>228</sup>

The characteristics of CEG reflect the notion that sustainability, as an inter-dependent, multidisciplinary and inter-related concept, requires a multilateral approach to governance. The characteristics of CEG, which correlate with some of the principles of sustainability referred to above,<sup>229</sup> include: fairness, accountability, responsibility and transparency,<sup>230</sup> participation, rule of law, responsiveness, consensus, equity, effectiveness, efficiency, coherence, integration, responsiveness and sustainability.<sup>231</sup>

In light of the above, CEG, in South African context, may be defined as:

The integration of the different spheres of government and line functionaries at international, intra-regional and intra-governmental level; co-operation between individual government officials in each sphere/line functionary; co-operation between government officials in different spheres/line functionaries; integration of policy, regulation methods and tools, service provision and scrutiny; and co-operation with industry and the public in order to achieve the principles of sustainability.

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<sup>228</sup> Section 195(1), Chapter 10 of the 1996 Constitution provides that:

Public administration must be governed by the democratic values and principles enshrined in the Constitution, including the following principles:

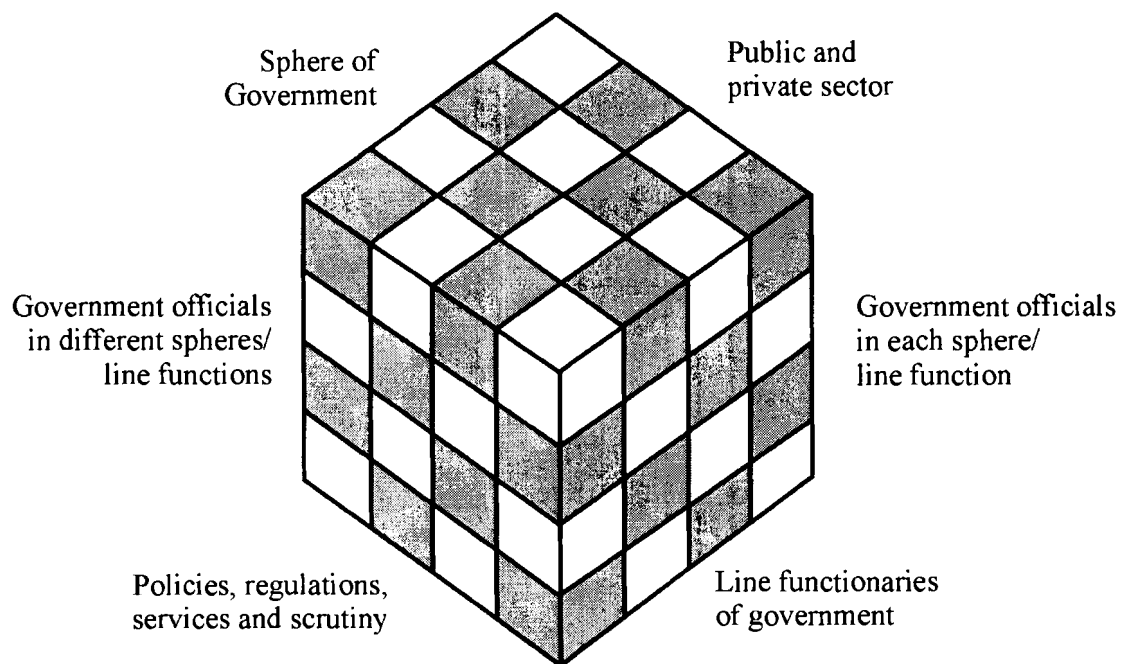
- (a) A high standard of professional ethics must be promoted and maintained.
- (b) Efficient, economic and effective use of resources must be promoted.
- (c) Public administration must be development-oriented.
- (d) Services must be provided impartially, fairly, equitably and without bias.
- (e) People's needs must be responded to, and the public must be encouraged to participate in policy-making.
- (f) Public administration must be accountable.
- (g) Transparency must be fostered by providing the public with timely, accessible and accurate information.
- (h) Good human-resource management and career-development practices, to maximise human potential, must be cultivated.
- (i) Public administration must be broadly representative of the South African people, with employment and personnel management practices based on ability, objectivity, fairness, and the need to redress the imbalances of the past to achieve broad representation.

<sup>229</sup> See paragraph 2.2 above.

<sup>230</sup> Boer, O' Beirne and Greyling "The Quest for Co-operative Environmental Governance" 11.

<sup>231</sup> Hatting *et al* "Obstacles to Successful Implementation of Governance Tools" 132-133. These principles furthermore correlate with section 41(1)(c) of the 1996 Constitution that requires governance to be effective, transparent, accountable and coherent. It also highlights the need for CEG to foster a culture of collaboration, internal organisational change, coherence and coordination, as well as flexible approaches to IEM and decision-making. Govender and Parkes "The Realities of Cooperative Governance" 124.

The essence of CEG is illustrated by Figure 3 below:<sup>232</sup>



**Figure 3: An Integrated Model for CEG**

## ***2.8 Integrated pollution prevention and control***

### ***2.8.1 Contextual background***

Another mechanism, apart from CEG and IEM that may be used to integrate fragmented governance regimes, is that of IPPC.

Pollution is arguably always harmful in an environmental context, since it invariably affects some or all components in a broadly defined environment.<sup>233</sup> Pollution usually occurs when unwanted by-products of human activity are introduced into the environment. Pollution is comprehensively defined by Bosman<sup>234</sup> as:

<sup>232</sup> This integrated model of CEG is based on the integrated model for IEM developed by Nel JG, Centre for Environmental Management, North-West University, Potchefstroom Campus.

<sup>233</sup> Bosman *Waste Disposal or Discharge* 21, and paragraph 2.6.3 above.

<sup>234</sup> Bosman *Waste Disposal or Discharge* 21. See also McLoughlin and Bellinger *Environmental Pollution Control* 5-7 for further definitions of pollution. See also for a comprehensive and insightful discussion on the concept of pollution, McLoughlin and Bellinger *Environmental Pollution Control* 1-22.

The direct or indirect introduction, as a result of human activity, of substances or energy into the environment which may cause hazards to human health and/or harm to living resources and ecological systems, damage to property, structures or amenities, or interference with legitimate uses or quality of the environment.<sup>235</sup>

There is a need to either prevent, or control pollution, so as to achieve sustainable results.<sup>236</sup> Pollution control in this context may be defined as "...measures to minimize [or prevent and remediate] air, water, land, noise, visual and other pollution, and the disposal of solid and liquid waste".<sup>237</sup> IPPC suggests an integrated approach to the control of pollution, with the primary aim to regulate and control pollution-causing releases from industrial processes.<sup>238</sup> IPPC is accordingly a regulatory measure that may be employed to regulate industrial pollution in an integrated fashion, by duly considering all the activities of the industrial installation and the effects of the activities and releases on air, land and water.<sup>239</sup>

Fragmented environmental governance regimes exist in South Africa, the NWP and other countries.<sup>240</sup> Fragmentation of environmental governance efforts may lead to unsustainable results.<sup>241</sup> Because of this fragmentation, the regulation of environmental authorisations is also fragmented and needs to be integrated. An integrated environmental authorisation system is primarily based on the concept of IPPC.<sup>242</sup> It is therefore essential to investigate the concept of IPPC as an integration strategy. In this investigation, the historical development of IPPC is explored to

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<sup>235</sup> Pollution is afforded an even more comprehensive meaning by the definition in the NEMA. Section 1 of the NEMA defines pollution as any change in the environment caused by substances; radioactive or other waves; or noise, odours, dust or heat.

<sup>236</sup> Bosman *Waste Disposal or Discharge* 13. The objectives of pollution control include, amongst others, eliminating and reducing pollution; formulating pollution policies; reducing waste; encouraging recycling or re-use of substances; determining the level of pollution which will be environmentally acceptable; enforcing the necessary measures to eliminate or reduce pollution to the latter level; protecting the interests of the public, minorities and individuals; protecting the environment for future generations, and protecting the polluter. See McLoughlin and Bellinger *Environmental Pollution Control* 9-22.

<sup>237</sup> Beale *The Manager and the Environment* 70. It should further be noted that pollution control is not merely aimed at decreasing pollution, but also at the minimisation of the incidence of pollution. Beale *The Manager and the Environment* 76.

<sup>238</sup> Note that the term IPPC is sometimes used interchangeably with the term Integrated Pollution Control (IPC). See in this regard paragraph 2.8.4 below.

<sup>239</sup> It should further be noted that there exist various types of IPPC strategies that may be implemented. Factors that may influence the choice on the appropriate type include the scope of control, the focus, and the manner of implementation. See in this regard Kidd 1995 *South African Journal of Environmental Law and Policy* 40-43.

<sup>240</sup> See chapters 3-6 below.

<sup>241</sup> See paragraph 2.2 above.

<sup>242</sup> See chapters 3-6 below.



emphasise the integrated nature of the concept. IPPC is furthermore defined and the relevance of this concept explained, for the purpose of addressing fragmentation by way of a one-stop environmental authorisation shop. The relationship between IPC and IPPC is also indicated.

### 2.8.2 Historical development of IPPC

In the past, control and regulation of industrial releases, or emissions to the environment, focused on land, air and water separately.<sup>243</sup> This fragmented and single-medium approach resulted in various disadvantages, because it merely "...shunt polluting releases from one environmental medium to another, according to whichever offers the path of least regulatory resistance".<sup>244</sup> This essentially resulted in a fragmented approach to pollution prevention and control. The rationale behind the establishment of IPPC furthermore emphasises the need to establish a more integrated regulatory framework of administrative bodies that are responsible for regulation of IPPC.<sup>245</sup> This includes the creation of an administrative body by various organs of state that should be more transparent, formalised, structured, participative, timetabled, centralised, integrated, more technocratic, and managerial.<sup>246</sup> An integrated system of pollution control should thus provide for an administrative system of control in which all forms of pollution control are administered by a single

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<sup>243</sup> Jongma *De Milieuvergunning* 3, Smith *Integrated Pollution Control* 2, and Hughes *et al Environmental Law* 495. See also Wolf and Stanley *Environmental Law* 260-261 for a more detailed discussion of the development of an integrated approach to pollution control.

<sup>244</sup> Smith *Integrated Pollution Control* 2. See also Newson *Planning, Control or Management?* 271. Kidd 1995 *South African Journal of Environmental Law and Policy* 38 notes that this has also been the case in South Africa. By shifting pollutants from one medium to another merely alters the problem of pollution with no resultant benefit to the receiving environment. A more integrated approach may however result in various benefits that include: economic benefits, regulatory compliance, reduction in liability, enhanced public image, and various other environmental benefits. Burke, Singh and Theodore *Environmental Management* 427, 436-438. See also the view of Glazewski *Environmental Law* 653, and Glazewski *Environmental Law in South Africa* 551-552.

<sup>245</sup> McLoughlin and Bellinger *Environmental Pollution Control* 23-24 state that administration is a primary element of pollution control. The administration will be responsible for, *inter alia*, direct supervision of actions taken to implement pollution control policy; determination of objectives, standards and authorisations; environmental monitoring; and research into matters relating to pollution control. The authors also acknowledge that it may be particularly beneficial for an administrative structure to cover all these responsibilities by way of a single and integrated administrative or governance system.

<sup>246</sup> Smith *Integrated Pollution Control* 3-4. The main emphasis of IPPC in this regard is arguably to reform the plethora of existing administrative bodies involved with regulation of pollution control, hence the emphasis on centralization and integration of administrative structures. Newson *Planning, Control or Management?* 274. Kidd 1995 *South African Journal of Environmental Law and Policy* 39 also points out that one of the benefits of IPPC is that it may lead to the simplification of the administrative system.

authority, or various authorities operating under strong coordination and co-operation.<sup>247</sup> It is in this context that the necessity for a more integrated approach was recognised.<sup>248</sup> 'Integrated' in this sense, entails an approach to pollution control that considers all emissions from an industrial installation to all environmental media in a coherent, holistic, integrated, inter-related and inter-dependent fashion.<sup>249</sup> Moreover, 'integration' may also mean legislative, institutional or scientific integration.<sup>250</sup> This should be done by way of, *inter alia*, regulation through an integrated administrative system that is based on an integrated environmental authorisation system.<sup>251</sup> The evolution of IPPC mainly took place in Europe and also led to the establishment of the IPPC Directive and accompanying integrated domestic approaches to pollution control throughout the EU, for example, in the Netherlands and Finland.<sup>252</sup>

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<sup>247</sup> McLoughlin and Bellinger *Environmental Pollution Control* 37-38. It is further suggested that such an integrated administrative authority may enable the authority to choose the best environmental option for the disposal of waste; it may prevent the migration of pollutants from one environmental medium to another; and it may be advantageous for future research into damaging effects of pollutants, as well as the transformation, migration, dispersal and concentration of pollutants. It may also provide for a single financial regime under which the authority can impartially examine the most effective use of available funds. See in this regard McLoughlin and Bellinger *Environmental Pollution Control* 37-38.

<sup>248</sup> Smith *Integrated Pollution Control* 2.

<sup>249</sup> Jongma *De Milieuvergunning* 36.

<sup>250</sup> Legislative integration entails drafting of a single act, coordination or integration of various acts, or setting of uniform norms and standards with regard to IPPC. Whilst institutional integration refers to either a single, or at least a fully coordinated administrative body for regulation, scientific integration relates to harmonization of scientific standards that indicate the pollution of all environmental media. See further in this regard, Glazewski *Environmental Law* 654, and Glazewski *Environmental Law in South Africa* 551-554.

<sup>251</sup> See in this regard Kidd 1995 *South African Journal of Environmental Law and Policy* 48-51, Glazewski *Environmental Law* 653-655, Glazewski *Environmental Law in South Africa* 551-554, and Stein 1997 *South African Journal of Environmental Law and Policy* 264-268.

<sup>252</sup> IPC was first raised in the UK during 1976 and was primarily based on the regulation of air pollution. Discussions followed in the rest of Europe which eventually resulted in the adoption of the IPPC Directive. Smith *Integrated Pollution Control* 20, 218-219, notes in this regard that IPC may arguably be regarded as the frontrunner for the adoption of IPPC. See also Newson *Planning, Control or Management?* 271-273, Farmer *Managing Environmental Pollution* 58-61, 72-74, Glazewski *Environmental Law* 655, Glazewski *Environmental Law in South Africa* 551-552, Weale *et al Environmental Governance in Europe* 64-65, and Hughes *et al Environmental Law* 495-542. See for a detailed discussion of the IPPC Directive and the implementation thereof in Finland and the Netherlands, chapters 4-6 below.

### 2.8.3 IPPC defined

IPPC is essentially a regulatory regime<sup>253</sup> that employs technology-based pollution standards that prescribe the best pollution control techniques in the form of, for example, 'best available techniques not entailing excessive costs' (hereafter BATNEEC) and 'best available techniques' (hereafter BAT).<sup>254</sup> The main objective is to control industrial pollution through an integrated regulatory framework in the form of an authorisation procedure that prescribes pollution control conditions, release limits or pollution standards.<sup>255</sup> Pollution standards, as environmental management tools, are part of IEM, because they may be employed to give an indication of the potential for pollution, since it is normally used to activate regulatory intervention.<sup>256</sup>

The underlying basis of IPPC includes agency structure and plant-by-plant procedures.<sup>257</sup> IPPC is a 'command and control' regulatory regime, since it uses environmental authorisations as the primary pollution control mechanism.<sup>258</sup> Industries which are subject to IPPC typically require a single, or integrated authorisation for all activities and pollution discharges from a specific site.<sup>259</sup> One of the primary objectives of such a regime is to establish the so-called one-stop authorisation shop, where it is not necessary for the operator to obtain separate authorisations from separate regulators, or authorities.<sup>260</sup> IPPC is accordingly built on

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<sup>253</sup> Regulation in this context means publicly administered constraints of private activities in a continuum of non-intervention and prohibition. It is essentially pollution causing activities of industry that are regulated through control of process releases by setting scientifically defined physical limits, or technology-based pollution standards of such releases. Smith *Integrated Pollution Control* 6, 17. See further on pollution standards, Farmer *Managing Environmental Pollution* 9-10, and Hens and Vojtisek *Environmental Standards* 118-120.

<sup>254</sup> Farmer *Managing Environmental Pollution* 60, and Smith *Integrated Pollution Control* 8. BATNEEC involves a systematic process that includes: identifying harm in any environmental medium, weighing up impacts to different media and thereby identifying the best environmental option, and adding economic analysis to ascertain whether the costs of pollution control options may exceed environmental benefits. See in this regard Farmer *Managing Environmental Pollution* 69. See chapters 4-6 below for a detailed discussion on BAT.

<sup>255</sup> Smith *Integrated Pollution Control* 8.

<sup>256</sup> Bosman *Waste Disposal or Discharge* 20.

<sup>257</sup> Newson *Planning, Control or Management?* 273.

<sup>258</sup> Wolf and Stanley *Environmental Law* 259, and Jans 'Relationship between the IPPC Directive and other EC Environmental Law' 45.

<sup>259</sup> Wolf and Stanley *Environmental Law* 259.

<sup>260</sup> Wolf and Stanley *Environmental Law* 259.

a holistic premise that pays attention to emissions to the environment as a whole, through integrated authorisation procedures and regulatory structures.<sup>261</sup>

The main features of IPPC include: covering of most of the serious polluting processes; provision of authorisation requirements for industrial operators; provision of emission standards and authorisation conditions that must be enforced by a statutory environmental administration body; provision of emission standards that are implemented to prevent or minimise substance releases in order to prevent environmental harm; and an authorisation process that is characterised by formal input from all interested and affected parties, thereby making it a participatory and transparent process.<sup>262</sup> Another feature of IPPC is that it internalises externalities, including pollution problems and the costs of pollution.<sup>263</sup> By way of an integrated approach to pollution control, the possible inter-changeability of emissions are taken into account and internalised in such a way that the costs of environmental pollution to one medium does not become an externality in terms of another medium.<sup>264</sup>

The benefits of IPPC include, *inter alia*, that it: provides for a preventive approach without transferring pollution problems from one environmental medium to another; provides for a more comprehensive array of efficient controls to regulate pollution; enhances prioritisation; provides for a better co-operation base with other policy sectors; allows simplification of the administrative system; facilitates good management and governance; and aims to reduce residuals and waste generated by industrial activities.<sup>265</sup>

In light of the foregoing, IPPC may be defined for the purpose of this study as:

A holistic regulatory regime that employs technology-based pollution standards, with the main objective to control industrial pollution through an integrated authorisation procedure and a centralised, or fully co-ordinated administration, by having regard to all emissions from an industrial installation to all environmental media in a coherent, holistic, inter-related and inter-dependent fashion.

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<sup>261</sup> Wolf and Stanley *Environmental Law* 259.

<sup>262</sup> Farmer *Managing Environmental Pollution* 60.

<sup>263</sup> Faure and Lefevre 1996 *European Environmental Law Review* 113, and Van de Gronden 1995 *Milieu en Recht* 247.

<sup>264</sup> Faure and Lefevre 1996 *European Environmental Law Review* 113.

<sup>265</sup> Kidd 1995 *South African Journal of Environmental Law and Policy* 39.

#### 2.8.4 *The relationship between IPC and IPPC*

The term IPPC is sometimes used interchangeably with the term IPC.<sup>266</sup> While the former is the term employed by the EU and the IPPC Directive, the latter is used in especially the United Kingdom (hereafter UK).<sup>267</sup> Both terms, however, carry more or less the same meaning, since IPPC shows more similarities to IPC than dissimilarities. IPPC is principally built on the theoretical premise of IPC, but Wolf and Stanley<sup>268</sup> warn that it would be "...wrong to view it [IPPC] as IPC with an added 'P'". The reason for this is that IPPC expands on the concept of IPC in various ways.<sup>269</sup> Improvements include: the introduction of BAT as opposed to BATNEEC; the setting of uniform European emission standards; an increased number of industrial processes to be regulated; an increase in prescribed polluting substances; and more stringent upgrading requirements pertaining to BAT standards.<sup>270</sup> Further improvements presented by IPPC include: that it is concerned with not only the control of pollution from processes, but also with more widely defined activities; IPPC endeavours to reduce emissions and not only preventing harm caused by emissions; the definition of 'pollution' is wider than that employed by IPC, since it also relates to noise and vibrations; in determining BAT in terms of IPPC, costs have a wider meaning than under BATNEEC in terms of IPC; IPPC imposes obligations to minimise waste production, to use energy efficiently, and to restore sites on closure, whereas IPC does not provide for this; there is a link between EIA and IPPC since EIA must be taken into account at the planning stage, whereas this is not the case with IPC; IPPC sets fixed emission limit values or other equivalents for certain listed pollutants, while IPC makes a distinction between prescribed and non-prescribed substances; and emission monitoring requirements must be included in the IPPC permit, whereas this is not necessarily the case with IPC.<sup>271</sup>

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<sup>266</sup> Emmot *IPPC Directive and its Developments* 24, notes in addition that the IPPC Directive is an example of just one of the ways in which IPPC may be expressed. For a comprehensive discussion on the IPPC Directive, see chapter 4 below.

<sup>267</sup> Hughes *et al Environmental Law* 518-519.

<sup>268</sup> Wolf and Stanley *Environmental Law* 291.

<sup>269</sup> Wolf and Stanley *Environmental Law* 259. It is suggested in this regard that IPPC has a wider focus and ambit than IPC. See Wolf and Stanley *Environmental Law* 291.

<sup>270</sup> Smith *Integrated Pollution Control* 218-222, and Farmer *Managing Environmental Pollution* 60-61.

<sup>271</sup> Hughes *et al Environmental Law* 518-519. For a further discussion on the benefits of IPPC as opposed to IPC, see Wolf and Stanley *Environmental Law* 291-292.

In light of the foregoing differences, it is apparent that IPPC applies to a wider range of industrial installations and activities which may contribute to more effective pollution prevention and control.<sup>272</sup> Whilst IPPC furthermore presents a more holistic approach to pollution prevention and control than IPC, it is also intended to encourage cost effective environmental performance which accords with current trends in the sustainability discourse.<sup>273</sup>

#### 2.8.5 *The relevance of IPPC for the integration effort*

Like IEM, holistic governance, and CEG, IPPC is based on the concepts of integration, coordination and co-operation. It suggests an integrated approach to regulating pollution by way of an integrated environmental authorisation system and an integrated, or fully coordinated environmental governance structure. IPPC is accordingly also part of the environmental governance effort and may be employed as a foundation to address fragmentation of environmental governance efforts in South Africa and the NWP. Environmental authorisations are employed in environmental governance processes and specifically the IPPC process, as 'command and control' tools that are used by environmental governance authorities to, *inter alia*, prevent pollution, regulate pollution activities, enforce legislation and enforce compliance with standards and conditions set out in authorisations.<sup>274</sup> Environmental authorisations are thus a central component in the IPPC process. It is therefore argued that integration of the current fragmented environmental authorisation regime may be facilitated by way of the integration and co-operation possibilities posed by IPPC. This, in turn, may suggest viable options to establish a fully integrated one-stop environmental authorisation shop that should address fragmentation in South Africa and the NWP.

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<sup>272</sup> Hughes *et al Environmental Law* 519.

<sup>273</sup> Hughes *et al Environmental Law* 519.

<sup>274</sup> See paragraph 1.1 above and chapters 4-6 below.

## **2.9    *Summary and conclusions***

### **2.9.1   *Sustainability***

A number of years have passed since the formal introduction of the concept of sustainable development into international, regional and domestic environmental law regimes. There is however a number of shortcomings that relate to this concept. Sustainable development is a transcendent term which is frequently, though incorrectly used. It is furthermore an inherently complex notion that derives its content from a multi-dimensional and multi-disciplinary framework. It is also difficult to translate sustainable development into realisable policy goals that governments, industry and other organisations can adopt. It is argued that sustainable development, as a concept, has become obsolete and that environmental sciences, including law, now require a more precise and concrete term, namely that of sustainability.

Whilst sustainable development entails a long-term approach for the establishment of an equilibrium between development and the environment, sustainability refers to activities or conditions that can be maintained in future without constant external inputs. Sustainability accordingly describes the ability to maintain a desired condition over time without eroding natural, social and financial resource bases. Efforts to achieve sustainable results are based on certain principles, including: the precautionary approach, the polluter pays principle, the cradle-to-grave principle, the principle of an integrated and holistic approach, the principle that due consideration must be given to all alternatives, the principle of continual improvement, accountability and liability, transparency and democracy, waste reduction, internalisation of costs, improvement of quality of life, and the principles of co-operative governance. It is argued that the ultimate goal of environmental governance reform from fragmentation to integration, should be the achievement of some, or all, of these principles of sustainability. It is also argued in this context that the South African environmental law regime is conducive for the achievement of sustainability.

Sustainability is defined for the purpose of this study as:

The ability to maintain a desired condition over time without eroding natural, social and financial resource bases, through a process of continual improvement in the form of sustainable development. Sustainability also relates to the integration of various considerations, including: the environment, the economy, social factors, environmental governance and management efforts, and public and industry involvement. Sustainable results may be achieved through application, implementation and enforcement of the various principles of sustainability and continual monitoring and post-decision follow-up of the results of these efforts.

### *2.9.2 Fragmentation of environmental governance efforts*

Fragmentation is a reality in environmental governance regimes the world over. Fragmentation of environmental governance efforts also exists in South Africa and the NWP. Fragmentation manifests in various ways, including: horizontal and vertical fragmentation; fragmentation of legislation; fragmentation of policies; and fragmentation of governance processes, tools and procedures. This also includes fragmentation of environmental authorisation systems.

Fragmentation may lead to several disadvantages and challenges which may be contrary to the achievement of sustainability. Some of the primary disadvantages include: duplication and overlap of the governance effort; costly delays in decision-making; inefficient arrangements between organs of state that control similar activities or proposals; significant gaps in control arrangements; conflicting conditions in authorisations; ineffective and unsustainable governance efforts; dumping of problems and costs by one organ on another; conflicting programmes and policy goals; inadequate sequencing; and inadequate response to needs in terms of service-delivery. It is argued that fragmentation must be addressed in order to achieve sustainable service-delivery in terms of environmental governance efforts.

### *2.9.3 Environmental governance, public administration and organisation behaviour*

The execution of environmental governance mandates lies solely within the domain of the public administration. The organisational behaviour of government officials involved with environmental governance may however contribute to fragmentation. The protection of turf, bureaucracy, irrational-decision-making and characteristics



inherent to administrative systems in developing countries are arguably, amongst other factors, responsible for the existence and exacerbation of fragmented governance efforts. It is argued that these factors may negate endeavours for the establishment of an integrated environmental governance effort.

For the eventual achievement of sustainable results, it is argued that the disadvantages of these factors be identified and addressed as a matter of primary importance. The various advantages posed by addressing unfavourable organisational behaviour by government officials may be beneficial for integration reforms and the achievement of sustainability. Some of the advantages include: opportunities to learn, to adapt and develop new competencies; the opportunity to gain resources, including time, money, information, legitimacy and status; the ability to share costs of associated risks; the ability to gain influence over a specific domain; the ability to manage uncertainty; the ability to solve invisible and complex problems; the ability to specialise or diversify; the ability to gain mutual support, group synergy and harmonious working relationships; and the ability to rapidly respond to changing demands from industry and the public. Moreover, a change in organisational behaviour that is receptive for coordination, co-operation and integration, may ultimately lead to the achievement of sustainable results, especially insofar as it relates to environmental governance efforts and service-delivery.

#### *2.9.4 Integration and holistic governance as opposites of fragmented governance*

Holistic governance arguably presents the ideal form of governance in terms of the achievement of sustainability. Holistic governance is the opposite of fragmented governance. There are various generic reasons for fragmentation in terms of governance efforts. Fragmented governance efforts have various disadvantages which may ultimately negate the achievement of sustainability. These disadvantages may be addressed, and sustainability may be achieved, by establishing a more holistic form of governance, which in environmental context, arguably represents a one-stop environmental authorisation shop. Holistic governance may be defined for the purpose of this study as:

The ideal form of governance which is established by way of collaboration, co-ordination, co-operation and integration of policies, regulation, service provision and scrutiny or assessment functions of co-existing governmental organs into a single system of government in order to achieve sustainable results.

Holistic governance may be established by way of a phased approach through the gradual implementation of collaboration, coordination, co-operation and integration strategies. Policy and operational integration are fundamental aspects of the journey towards the achievement of holistic governance. Holistic, or integrated environmental governance is, *inter alia*, based on the concepts of IEM, CEG and IPPC. Implementation of these concepts may further the establishment of an integrated, or holistic environmental governance regime.

#### 2.9.5 IEM

IEM may suggest a possible strategy to address fragmented environmental governance efforts. IEM entails an integrated approach to the management, or governance, of the activities and effects of activities of people in the environment, in order to achieve the principles of sustainability.

Integration in terms of IEM is understood to include six components of governance and management, namely: the different spheres of government; the different line functionaries in each sphere, the various tools for environmental management and governance; environmental media; the Deming management approach; and decision-making cycles. The integration of these six aspects should be considered in the context of the project life-cycle, which illustrates the inter-related and comprehensive nature of IEM. Based on the foregoing understanding of integration, IEM may be defined for the purpose of this study as:

The management of the activities of people at micro and macro level to ensure achievement of the principles of sustainability, notably to ensure the utilisation of natural resources provided by all environmental media within their carrying capacities, while promoting economic growth as primary objective, by ensuring the implementation of decision-making and management tools for environmental management; based on the Deming-management approach, for the different phases of the project and product life-cycles through the integration of the activities between the different spheres of government; and within their various line functions.

Because IEM also necessitates the integration of tools for governance and management in the form of environmental authorisations, it is argued that integration efforts pertaining to the current fragmented environmental authorisation regime in South Africa and the NWP, be based on, *inter alia*, IEM.

#### 2.9.6 CEG

Co-operative governance is provided for by the South African environmental law regime. Co-operative governance is also applicable to the environmental governance sphere and entails the integration of the different spheres of government and line functionaries at international, intra-regional and intra-governmental level; co-operation between individual government officials in each sphere/line functionary; co-operation between government officials in different spheres/line functionaries; integration of policy, regulation methods and tools, service provision and scrutiny; and co-operation with industry and the public in order to achieve sustainability. This integration and co-operation effort may be termed, CEG. CEG may present a possible solution to address fragmented environmental governance efforts. CEG furthermore stands in close correlation with the concepts of holistic governance, IEM and IPPC, and may, as a foundation for integration and co-operation, suggest possible solutions to achieve sustainable service-delivery results.

#### 2.9.7 IPPC

IPPC may be defined as:

A holistic regulatory regime that employs technology-based pollution standards, with the main objective to control industrial pollution through an integrated authorisation procedure and centralised, or fully co-ordinated administration by having regard to all emissions from an industrial installation to all environmental media in a coherent, holistic, inter-related and inter-dependent fashion.

IPPC recognises challenges posed by fragmented environmental governance spheres and suggests that integration may be facilitated by way of integrated, or fully coordinated environmental governance structures, and an integrated environmental authorisation system, possibly in the form of a one-stop authorisation shop. It is noteworthy in this context that the concept is specifically based on an integrated

authorisation system which is a form of a 'command and control' type environmental management tool. The IPPC Directive, and the approaches of Finland and the Netherlands relating to pollution prevention and control, are based on the concept of IPPC.

Although IPC resembles IPPC, the latter concept poses more benefits than IPC. IPPC furthermore stands in close correlation with holistic governance, IEM and CEG, since it also relates to the integration of environmental governance efforts. IPPC may accordingly be employed as a foundation to address fragmentation in South Africa and the NWP. As such, it poses several advantages including: that it provides for a preventive approach without transferring pollution problems from one environmental medium to another; that it provides for a more comprehensive array of efficient controls to regulate pollution; that it enhances prioritisation; that it provides for better co-operation with other policy sectors; that it allows simplification of the administrative system; that it facilitates good management and governance; and that it aims to reduce residuals and waste generated by industrial activities in a sustainable way.

### **3. FRAGMENTATION OF ENVIRONMENTAL GOVERNANCE EFFORTS IN SOUTH AFRICA AND THE NWP**

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## **Chapter 3: Fragmentation of environmental governance efforts in South Africa and the NWP**

### **3.1 *Introduction***

Fragmentation and organisational behaviour in South African and NWP environmental departments are investigated in this chapter. An exposition of the concepts of IEM, CEG and IPPC, as it is currently entrenched in South African law, is also given. These concepts are specifically investigated to ascertain the possibilities for integration in the South African and NWP environmental governance sphere.

The following questions need to be answered in light of the foregoing:

1. How does fragmentation manifest in South Africa and the NWP, and what are the reasons for this fragmentation?
2. How does organisation behaviour in environmental departments in the national and provincial sphere contribute to fragmentation?
3. What does IEM, CEG and IPPC entail in the South African and NWP context, and how may it contribute to address fragmentation?

### **3.2 *Fragmentation in the South African and NWP environmental governance sphere***

#### **3.2.1 *Introduction***

During the past years, South Africa undertook a number of initiatives to reform environmental policies, including legislation.<sup>1</sup> Reformed policies and legislation provide for, amongst others, important tools, structures, and processes to achieve sustainability.<sup>2</sup> Whilst these legislative and policy measures present a modern and comprehensive framework within which environmental governance may be executed,

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<sup>1</sup> See chapter 1 above.

<sup>2</sup> Centre for Environmental Management *Report on an Environmental Management System for the North-West Province* 34-35, and paragraph 2.2 above.

structural fragmentation in terms of separate, disjointed line functions at all three spheres and line functionaries of government remain.<sup>3</sup>

Structural fragmentation results in fragmented policy processes, and legislation at a strategic level, and uncoordinated use of policy tools at the operational level.<sup>4</sup> At policy level, there may be interesting initiatives to address this disjointed and fragmented governance processes. Some of these initiatives include holistic governance, IEM, CEG, and IPPC which are discussed in detail elsewhere in this study.<sup>5</sup> At the operational level, disjointed, fragmented and incremental governance processes are still prevalent.<sup>6</sup>

The following paragraphs address the issue of fragmentation of the environmental governance regime at both policy and operational levels insofar as it manifests in South Africa and the NWP.

### *3.2.2 Nature and extent of fragmentation*

#### *3.2.2.1 Structural fragmentation*

A comprehensive survey of fragmented environmental governance efforts in South Africa and the NWP suggests that fragmentation manifests in various ways.<sup>7</sup> Firstly, one may speak of vertical and horizontal fragmentation of the environmental governance structure. Vertical fragmentation refers to the three separate and autonomous spheres of government, including the national, provincial and local spheres. In each sphere, various independent and autonomous environmental

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<sup>3</sup> Nel, Kotzé and Snyman "Strategies to Integrate Environmental Policy" 1-2, and Centre for Environmental Management *Report on an Environmental Management System for the North-West Province* 34-35.

<sup>4</sup> Nel, Kotzé and Snyman "Strategies to Integrate Environmental Policy" 1-2. See also paragraph 2.5 above.

<sup>5</sup> See paragraphs 2.6-2.8 above and 3.4-3.6 below.

<sup>6</sup> Nel, Kotzé and Snyman "Strategies to Integrate Environmental Policy" 1-2.

<sup>7</sup> Centre for Environmental Management *Report on an Environmental Management System for the North-West Province* 1-374.



departments, or line functionaries, exist. This delineation gives rise to fragmentation in a horizontal sense.<sup>8</sup>

### 3.2.2.2 Fragmented legislation

Secondly, fragmentation is evident from the various sectoral, or silo-based environmental acts that exist. Appendix 1 sets out a table containing a selection of principal environmental acts in terms of which an authorisation is required prior to commencement of a certain activity.<sup>9</sup> It is evident from the exposition in Appendix 1 that the various environmental acts prescribe a multitude of procedures, processes and environmental management tools that cause an overlap of jurisdictions and give rise to confusing authorisation processes and procedures that must be followed by an applicant. There are also various relevant competent authorities involved, and other legislation that may, in addition, be applicable directly or indirectly.

In terms of the agricultural sector, the *Conservation of Agricultural Resources Act* 43 of 1983 provides for control measures which must be complied with by land users;<sup>10</sup> the *Fertilizers, Farm Feeds, Agricultural Remedies and Stock Remedies Act* 36 of 1947 provides for registration of fertilizers, farm feeds, agricultural remedies, stock remedies, sterilisation plants and pest control operators;<sup>11</sup> and the *Subdivision of Agricultural Land Act* 70 of 1970 requires a written authorisation by the Department of Agriculture before agricultural land may be subdivided.<sup>12</sup>

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<sup>8</sup> See also Besdziek *Provincial Government* 191, for a discussion on the horizontal and vertical relationships that manifest between the various spheres and line functionaries of government.

<sup>9</sup> See Appendix 1 below. This table is based on a study recently concluded in terms of which various environmental acts were analysed in order to determine the fragmented nature of authorisation provisions, various competent authorities, and various processes contained in environmental acts. See for the full report, Centre for Environmental Management *Report on an Environmental Management System for the North-West Province* 82-200. This report specifically discusses authorisation processes and relevant competent authorities in terms of the *National Nuclear Regulator Act* 47 of 1999, the *Hazardous Substances Act* 15 of 1973, the *Subdivision of Agricultural Land Act* 70 of 1970, the *Conservation of Agricultural Resources Act* 43 of 1983, the *National Water Act* 36 of 1998, land use and planning legislation, and EIA in terms of the ECA, the *Atmospheric Pollution Prevention Act* 45 of 1965, and the *National Heritage Resources Act* 45 of 1999.

<sup>10</sup> Section 6(1).

<sup>11</sup> Section 3(1)(a).

<sup>12</sup> Section 3. Apart from authorisation provisions in terms of these principle acts, the following acts may also be applicable to agricultural resources: the *Stock Remedies Act* 36 of 1947, the *Agricultural Pests Act* 36 of 1983; provincial legislation; and by-laws. See further Glazewski *Environmental Law* 218-222, and Glazewski *Environmental Law in South Africa* 184-190.

Inland water resources are principally regulated by the *National Water Act* 36 of 1998 (hereafter the NWA), which provides for, amongst others, water use licences,<sup>13</sup> provisions on existing lawful water uses,<sup>14</sup> authorisation of controlled activities,<sup>15</sup> and registration of dams that pose a safety risk.<sup>16</sup> Other acts are however also applicable to the conservation of water resources. Section 20 of the *Environment Conservation Act* 73 of 1989 (hereafter ECA), requires, for example, that no person shall establish, provide, or operate any waste disposal site without a permit issued by the Minister of DEAT. Sections 21(f) and 21(g) of the NWA contain similar provisions that require a water-use licence by DWAF for discharging waste or water containing waste into a water resource through a pipe, canal, sewer, sea outfall or other conduit; and disposing of waste in a manner which may detrimentally impact on a water resource. It is clear in this instance that two different authorisations for the same activity, based on two different acts, administrative processes and jurisdictions, are required.<sup>17</sup> The *Water Services Act* 108 of 1997 further requires approval to operate as a water services provider and an authorisation for abstracting water or discharging any effluent.<sup>18</sup> The *Mineral and Petroleum Resources Development Act* 28 of 2002 requires any holder of a prospecting, mining, exploration or production right to authorise any mining-related activity that may affect water resources.<sup>19</sup> This act also provides that a closure certificate may only be issued if DWAF confirmed in writing that considerations relating to water resources have been addressed.<sup>20</sup> The *Conservation of Agricultural Resources Act* 43 of 1983 and the *Health Act* 63 of 1977 further respectively provide for authorisation of agricultural activities that may influence water resources,<sup>21</sup> and regulations on new buildings and provision of sanitation.<sup>22</sup> The relevant competent authorities include, amongst others, DWAF, DEAT, DME, Department of Agriculture, and the Department of Health.<sup>23</sup>

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<sup>13</sup> Section 22.

<sup>14</sup> Section 34(1).

<sup>15</sup> Section 37(2).

<sup>16</sup> Section 120(1).

<sup>17</sup> For fragmentation of environmental governance efforts that relate to the energy sector, see Du Plessis "Legal Mechanisms for Co-operative Governance" 1-23.

<sup>18</sup> Sections 22(1) and 32(e).

<sup>19</sup> section 5(3).

<sup>20</sup> Section 43(5).

<sup>21</sup> Section 6(1).

<sup>22</sup> Section 34(1).

<sup>23</sup> See Appendix 1 below.

Air pollution is regulated by the *Atmospheric Pollution Prevention Act* 45 of 1965 (hereafter APPA), which is soon to be replaced by the *National Environmental Management: Air Quality Act* 39 of 2004 (hereafter NEMAQA).<sup>24</sup> The NEMAQA requires an atmospheric emission licence for listed activities and activities related to controlled emitters and controlled fuels.<sup>25</sup> The APPA, which is still in force, provides for authorisation of scheduled processes in controlled areas; authorisation for the erection, alteration or extension of plants used for the purpose of carrying on scheduled processes; and authorisation for import and manufacture of fuel burning appliances.<sup>26</sup> The *Health Act* 63 of 1977 and *National Road Traffic Act* 93 of 1996 respectively provide for regulation of health matters connected with air pollution,<sup>27</sup> and transportation of goods that may affect air quality.<sup>28</sup> Relevant competent authorities include, amongst others, DEAT, the Department of Health, the Department of Transport, and metropolitan and district municipalities.<sup>29</sup>

Biodiversity resources are regulated by various acts.<sup>30</sup> The *National Environmental Management: Biodiversity Act* 10 of 2004 is the principal act and requires authorisation of activities relating to, amongst other, specimens of listed, threatened, or protected species; alien species; listed invasive species; genetically modified organisms (hereafter GMO); and bioprospecting.<sup>31</sup> The *National Forests Act* 84 of 1998 provides for authorisation of, *inter alia*, activities relating to the use of natural forests, establishment of plantations, authorisation procedures for various forestry

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<sup>24</sup> The *Occupational Health and Safety Act* 85 of 1993 that provides for the health and safety of mine employees may also be relevant insofar as it relates to the health and safety of mine workers in relation to air pollution.

<sup>25</sup> Sections 22, 25(1), 28(1), 37(1) and 42(1).

<sup>26</sup> Section 9(1).

<sup>27</sup> Section 27(1).

<sup>28</sup> Section 54.

<sup>29</sup> See Appendix 1 below.

<sup>30</sup> Kotzé and Du Plessis "Domestic Biodiversity Protection" 17-19. Apart from authorisation provisions in terms of the *National Environmental Management: Biodiversity Act* 10 of 2004, the following acts may also be applicable to biodiversity resources: the ECA; the *Plant Breeder's Rights Act* 15 of 1976; the *Plant Improvement Act* 53 of 1976; the *Animal Improvement Act* 62 of 1998; the *Agricultural Pests Act* 36 of 1983; the *Foodstuffs, Cosmetics and Disinfectants Act* 54 of 1972; the *Animal Protection Act* 71 of 1962; the *Sea Birds and Seals Protection Act* 46 of 1973; the *National Veld and Forest Fire Act* 101 of 1998; the *National Parks Act* 57 of 1976; the *Mountain Catchment Areas Act* 63 of 1970; the *Management of State Forests Act* 128 of 1992, provincial legislation, and numerous by-laws. See further Glazewski *Environmental Law* 315-324, 439-456, and Glazewski *Environmental Law in South Africa* 280-291, 382-397.

<sup>31</sup> Sections 57(1), 65(1), 69(1), 71(1), 78(1), 81(1), 87 and 92(1).

activities, and activities relating to the selling of forest produce.<sup>32</sup> The *Genetically Modified Organisms Act* 15 of 1997 is the principal act in terms of which GMOs are regulated. The Act specifically requires authorisation of activities relating to the development, production, use and application of GMOs.<sup>33</sup> The *National Environmental Management: Protected Areas Act* 57 of 2003 is also applicable to biodiversity resources insofar as it relates to authorisation of activities, including commercial prospecting and mining activities, in nature reserves and world heritage sites.<sup>34</sup> Relevant competent authorities include, *inter alia*, DEAT, DWAF, and the Department of Agriculture.<sup>35</sup>

Regulation of minerals, petroleum and energy is also based on a multitude of acts.<sup>36</sup> These include, *inter alia*, the *Nuclear Energy Act* 46 of 1999 which provides for authorisation of activities relating to nuclear source materials;<sup>37</sup> and the *Nuclear Regulator Act* 47 of 1999 which provides for authorisation of activities involving nuclear installations and nuclear vessels.<sup>38</sup> The *Mineral and Petroleum Resources Development Act* 28 of 2002 is applicable to mineral and petroleum resources and provides for authorisation of mining activities that may affect water resources; approval of environmental management programmes and plans relating to mining activities; reconnaissance permissions; prospecting rights; mining rights; EIAs relating to mining activities; and authorisation of mining activities in certain areas

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<sup>32</sup> Sections 7(1), 10(1), 15(1), 23(1), 24(9) and 28(4).

<sup>33</sup> Sections 5 and 14.

<sup>34</sup> Sections 50(5) and 48(1).

<sup>35</sup> See Appendix 1 below.

<sup>36</sup> These include the NEMA; the *National Parks Act* 57 of 1976; the NWA; the *Water Services Act* 108 of 1997; the *Atmospheric Pollution Prevention Act* 45 of 1965; the *Nuclear Energy Act* 131 of 1993; the *Mine Health and Safety Act* 29 of 1996; the *Electricity Act* 41 of 1987; the *Petroleum Products Act* 120 of 1977; the *Income Tax Act* 58 of 1962; and provincial legislation and by-laws. See further Glazewski *Environmental Law* 581-589, Glazewski *Environmental Law in South Africa* 480-483, and Du Plessis *South Africa* 29-121. Du Plessis *Energy Law and Environmental Protection* 103, emphasises the fragmented nature of energy laws in South Africa, by stating that laws relating to energy usually:

...address the cycle of sourcing, exploitation, generation or production, transportation, distribution or consumption. The topics are either not dealt with or to be found in different pieces of legislation.

<sup>37</sup> Sections 34(1), 35(1) and 46(1).

<sup>38</sup> Sections 20(1).

such as national parks.<sup>39</sup> The principal competent authorities in this regard are DME and DEAT.<sup>40</sup>

Heritage resources are principally regulated by the *National Heritage Resources Act* 25 of 1999. The Act provides for authorisation of activities relating to, *inter alia*, destruction, excavation, alteration, restoration, removal, and subdivision of heritage sites and objects, and submission and approval of heritage impact assessments (hereafter HIA).<sup>41</sup> Apart from authorisation provisions in terms of this act, the following acts may also be applicable to heritage resources: the *National Monuments Act* 28 of 1969; the *Wreck and Salvage Act* 94 of 1996; the *Cultural Institutions Act* 119 of 1998; the *National Heritage Council Act* 11 of 1999; the NEMA; provincial legislation, and by-laws.<sup>42</sup> The relevant competent authorities include the South African Heritage Resource Agency (hereafter SAHRA), DEAT and the Department of Arts and Culture.<sup>43</sup>

Marine resources and marine pollution are regulated by various issue-specific acts.<sup>44</sup> The *Marine Living Resources Act* 18 of 1998 provides for authorisation of activities relating to the fishing industry, including, authorisation of commercial fishing, subsistence fishing, mariculture, fish processing plants, and fishing vessels.<sup>45</sup> The *Marine Pollution (Control and Civil Liability) Act* 6 of 1981 regulates marine pollution by prescribing authorisation requirements for, amongst others, offshore installations and vessels carrying possible polluting substances.<sup>46</sup> The *Dumping at Sea Control Act* 73 of 1980 and the *Sea Shore Act* 21 of 1935 are also relevant for marine pollution insofar as they respectively provide for authorisation of dumping of polluting substances at sea,<sup>47</sup> and authorisation of activities involving removal of

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<sup>39</sup> Sections 5(3), 5(4), 13(1), 16(1), 20(1), 22(1), 22(4), 27(1), 39(1), 48(1), 74(1), 76(1), 79(1) and 83(1).

<sup>40</sup> See Appendix 1 below.

<sup>41</sup> Sections 27(18), 29(10), 31(7), 32(17), 34(1), 35(4), 36(3), and 38.

<sup>42</sup> See further Glazewski *Environmental Law* 603-613, and Glazewski *Environmental Law in South Africa* 517-528.

<sup>43</sup> See Appendix 1 below.

<sup>44</sup> Apart from the acts discussed here, the following acts may also be applicable: the *Maritime Zones Act* 15 of 1994; the *Seal Birds and Seals Protection Act* 46 of 1973; the *Health Act* 63 of 1977; provincial legislation, and by-laws. See further Glazewski *Environmental Law* 503-505, and Glazewski *Environmental Law in South Africa* 421-422.

<sup>45</sup> Sections 18(1), 23(1), 39(1) and 40.

<sup>46</sup> Sections 21(1) and 24(1).

<sup>47</sup> Section 3(1).

resources found in the ocean and on sea shores.<sup>48</sup> Competent authorities responsible for regulation include, amongst others, DEAT, the South African Maritime Safety Authority, and the Department of Transport.<sup>49</sup>

Chapter 5 of the NEMA, as amended by the National Environmental Management Second Amendment Act 2004 regulates EIA.<sup>50</sup> It should also be noted that apart from the NEMA provisions on EIA, some sectoral acts also provide for EIA procedures. These acts include, *inter alia*, the *National Heritage Resources Act* 25 of 1999, and the *Mineral and Petroleum Resources Development Act* 28 of 2002. These acts respectively require a HIA,<sup>51</sup> and an EIA which must be conducted before commencement of certain mining activities.<sup>52</sup> Authorities responsible for the regulation of EIAs include DEAT, SAHRA and DME.<sup>53</sup>

The exposition above demonstrates that governance efforts executed by way of the 'command and control' type regulation through environmental authorisations are silo-based and environmental media-specific with various acts, provisions, authorisation procedures and competent authorities involved.

### 3.2.2.3 Fragmentation in terms of land use and planning

Thirdly, fragmentation is also evident in the current land use management and planning framework in South Africa.<sup>54</sup> Scheepers<sup>55</sup> observes in this regard that land degradation, land denudation and soil erosion, are matters of real concern in South Africa. In terms of a more sustainable land-use strategy, it is emphasised that more effective resource-use planning, land and resource management strategies, and

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<sup>48</sup> Sections 3(2) and 5(1).

<sup>49</sup> See Appendix 1 below.

<sup>50</sup> EIA was previously regulated in terms of the ECA. See Appendix 1 for the relevant provisions of the ECA in this regard. Section 24 of the NEMA, as amended by the *National Environmental Management Second Amendment Act* 2004, currently regulates EIA in South Africa. It is envisaged that the amended section 24 will come into force in the second part of 2005.

<sup>51</sup> Section 35(4) of the *National Heritage Resources Act* 25 of 1999. See also paragraph 3.2.2.2 above, for a discussion on instances where the EIA and HIA processes may run consecutively.

<sup>52</sup> Section 22(4) of the *Mineral and Petroleum Resources Development Act* 28 of 2002.

<sup>53</sup> See Appendix 1 below.

<sup>54</sup> See for a detailed discussion Kotzé *Strategies for Integrated Environmental Governance in South Africa* 2, 5-6; and Centre for Environmental Management *Report on an Environmental Management System for the North-West Province* 136-154.

<sup>55</sup> Scheepers *Introduction to the Law Applicable to Development* 240.

adequate monitoring and maintenance of land use development are needed.<sup>56</sup> A more sustainable land use strategy may however not be achieved because "...the responsibility for natural resource management is spread over different national and provincial ministries, each carrying out their jurisdictions as specified by the different Acts they have to implement".<sup>57</sup> The result is that the current legal, institutional, governance and management framework, do not facilitate integrated approaches to land use and planning. An integrated approach to environmental governance efforts, land use and planning issues, may accordingly be significant to achieve a sustainable land use strategy in South Africa.

It is noted in this regard that the land use management and planning regime in South Africa forms an integral part of the entire environmental governance effort. Land use lies at the core of some of the most contentious issues surrounding development initiatives. This is especially true in the case of developing countries such as South Africa. During consideration of the viability of a proposed development, some pertinent issues need to be addressed, including amongst others: the impact of development on the environment, job-creation, economic growth, poverty alleviation, and provision of housing and physical infrastructure.<sup>58</sup> A central component in these considerations is administrative decision-making by way of environmental governance efforts that are executed by various authorities in terms of a multitude of acts. It may be derived from Appendix 1 that environmental governance efforts relating to land use in South Africa is fragmented along various acts and authorities that either directly, or indirectly, influence land use and planning issues.<sup>59</sup> Consequently, the administration of these acts is also fragmented along the various spheres of government and different line-functionaries in each sphere.<sup>60</sup> This point has been reiterated in the High Court of South Africa, where it was stated that:

The present application illustrates that the statutory framework regulating town planning and building regulations in its present form is fragmented and cumbersome in the extreme...It requires a vast bureaucratic machine to administer all these provisions...The system also frequently...gives rise to conflicting and inconsistent decisions taken by different functionaries, officials and organs at different levels [sic] of local and provincial

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<sup>56</sup> Scheepers *Introduction to the Law Applicable to Development* 240.

<sup>57</sup> Scheepers *Introduction to the Law Applicable to Development* 240.

<sup>58</sup> Glazewski *Environmental Law* 229-230, and Glazewski *Environmental Law in South Africa* 195.

<sup>59</sup> See Appendix 1.

<sup>60</sup> For a comprehensive discussion, see Glazewski *Environmental Law* 235-239, and Glazewski *Environmental Law in South Africa* 200-202.

government. It would be of great assistance to everyone involved in the process...if the administrative machinery required to regulate these matters could be consolidated, simplified and streamlined.<sup>61</sup>

The legislative framework pertaining to land use and planning further consists of various acts.<sup>62</sup> Some of the principal acts are the *Development Facilitation Act* 67 of 1995 that provides for authorisation of land development activities;<sup>63</sup> the *Physical Planning Act* 125 of 1991 that provides for authorisation of town planning schemes;<sup>64</sup> and the *Subdivision of Agricultural Land Act* 70 of 1970 insofar as it provides for authorisations before agricultural land may be subdivided.<sup>65</sup>

#### 3.2.2.4 Fragmented pollution control framework

Fourthly, pollution control and waste management is also regulated in a fragmented fashion.<sup>66</sup> Glazewski<sup>67</sup> observes in this regard that:

Pollution control laws have traditionally been applied by different national, provincial and local levels [sic] of government, corroborating the general criticism that the administration of environmental laws is diffuse and uncoordinated. This situation has been exacerbated rather than simplified by the new Constitution, as seen in chapter 4, which creates concurrent national, provincial and, in some instances, local government legislative competence in the sphere of pollution control. Moreover, administrative acts, such as the issuing of permits and the granting of exemptions, are carried out by officials at all levels [sic] of government.<sup>68</sup>

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<sup>61</sup> *Camps Bay Ratepayers and Residents Association and Others v The Minister of Planning, Culture and Administration (Western Cape) and Others* 2001 4 SA 301 (CPD).

<sup>62</sup> The following acts may also be applicable to land use and planning: the *Upgrading of Land Tenure Rights Act* 122 of 1991; the *Restitution of Land Rights Act* 22 of 1994; the *Communal Property Associations Act* 28 of 1996; the *Land Reform (Labour Tenants) Act* 3 of 1996; the *Interim Protection of Informal Land Rights Act* 31 of 1996; the *Extension of Security of Tenure Act* 62 of 1997; the *Prevention of Illegal Eviction and Unlawful Occupation of Land Act* 19 of 1998; the *Designated Areas Development Act* 87 of 1979; the *Less Formal Township Establishment Act* 113 of 1991; the *Local Government Transition Act* 209 of 1993; the *Local Government: Municipal Structures Act* 117 of 1998; the *Local Government: Municipal Systems Act* 32 of 2000; the *National Building Regulations and Building Standards Act* 103 of 1977; and provincial legislation and by-laws. See further Glazewski *Environmental Law* 222-224, 244-253, Glazewski *Environmental Law in South Africa* 187-190, 207-215, Scheepers *Introduction to the Law Applicable to Development* 1-356, and Centre for Environmental Management *Report on an Environmental Management System for the North-West Province* 136-154.

<sup>63</sup> Sections 31(1), 42(1) and 61(1).

<sup>64</sup> Sections 27(1) and 29.

<sup>65</sup> Section 3.

<sup>66</sup> See further Kotzé and Feris *South Africa* 39-44.

<sup>67</sup> Glazewski *Environmental Law* 632, and Glazewski *Environmental Law in South Africa* 533-536.

<sup>68</sup> See also Bosman, Kotzé and Du Plessis 2004 *SA Public Law* 411-421, and paragraph 3.2.3 below, for a discussion on fragmentation of governance efforts caused by the 1996 Constitution.



Regulation of pollution and waste management in South Africa is thus environmental media-specific and based on various acts and different competent authorities. There is, for example, no single, integrated act that regulates land, air, water and noise pollution in an integrated fashion. Instead, the regulatory framework for pollution consists of a multitude of acts, including amongst others: the NEMA; the ECA; the NWA; the *Health Act* 63 of 1977; the *Foodstuffs, Cosmetics and Disinfectants Act* 54 of 1972; the *International Health Regulations Act* 28 of 1974; the *Nuclear Energy Act* 46 of 1999; the *Nuclear Regulator Act* 47 of 1999; the *Conservation of Agricultural Resources Act* 43 of 1983; the *Fertilisers, Farm Feeds, Agricultural Remedies and Stock Remedies Act* 36 of 1947; the *Agricultural Pests Act* 30 of 1983; the *Occupational Health and Safety Act* 85 of 1993; the *Advertising on Roads and Ribbon Development Act* 21 of 1940; the *National Building Regulations and Building Standards Act* 103 of 1977; the *Aviation Act* 74 of 1962; the *Criminal Procedure Act* 51 of 1977; provincial legislation; and various by-laws.<sup>69</sup> Moreover, issue-specific acts require several authorisations for possible polluting activities. These include, for example, the *Hazardous Substances Act* 15 of 1973 insofar authorisation requirements relate to activities involving specifically listed hazardous substances;<sup>70</sup> the provisions of the NEMAQA insofar as it relate to air pollution; and the provisions of legislation relating to marine pollution.<sup>71</sup> Possible competent authorities include, amongst others, DEAT, DWAF, DME, the Department of Transport, the Department of Agriculture, and the Department of Health. Fragmentation caused by this diffuse regime is further exacerbated by the fact that South Africa does not have effective legislation that deals with IPPC.<sup>72</sup>

### 3.2.2.5 Fragmentation in the provincial sphere

It is further noted that fragmentation in the national sphere, as described above, also leads to fragmentation of environmental governance efforts in the provincial sphere of

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<sup>69</sup> See further Glazewski *Environmental Law* 627-779, and Glazewski *Environmental Law in South Africa* 533-630. Apart from the plethora of sectoral legislation that regulates pollution control and waste management, principles of common law, including the law of delict, criminal law, neighbour law and the law of nuisance are also applicable. See further Glazewski *Environmental Law* 630, and Glazewski *Environmental Law in South Africa* 533.

<sup>70</sup> Sections 3(1), 3A(1) and 4(1).

<sup>71</sup> See paragraph 3.2.2.2 above.

<sup>72</sup> See paragraph 3.6 below.

government.<sup>73</sup> This is also true for the NWP scenario. The NWP is one of the nine provinces in South Africa and consists of four district municipalities and twenty-one local municipalities. It is the sixth largest province in South Africa and is characterised by a complex environment.<sup>74</sup> The state of the environment in the NWP reflects the current situation in South Africa. Key problems include, *inter alia*, water pollution, land degradation, mining, air pollution and the loss of biodiversity.<sup>75</sup>

Apart from these problems, fragmentation of environmental governance efforts poses one of the major challenges in the province. Fragmentation is specifically exacerbated in the provincial sphere due to the demarcation of nine provinces and the integration of the former self-governing territories,<sup>76</sup> TBVC states,<sup>77</sup> and former South African Development Trust-land into some of these provinces. Du Plessis<sup>78</sup> notes in this regard that different legislation, proclamations and ordinances relating to environmental issues were promulgated, which leads to legal pluralism. It is further observed that current provincial legislative processes must have due regard to uniformity and integration in terms of structures, policies, jurisdictions and legislation, in order to avoid the creation of further fragmentation.<sup>79</sup>

The national environmental legislative framework applies to all the provinces in South Africa. This means that fragmentation of this framework is also applicable to the provinces, including the NWP. Legislative fragmentation is also especially observed in provincial nature conservation laws, forestry legislation, and water law frameworks.<sup>80</sup> Structural fragmentation in the NWP manifests in the various departments that are responsible for executing environmental governance tasks. Apart from the provincial Department of Agriculture Conservation and Environment (hereafter DACE) which acts as the environmental lead agent in the NWP, a multitude

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<sup>73</sup> See paragraph 3.2.2.4 above.

<sup>74</sup> DACE *NWP State of the Environment Report*  
<http://www.environment.gov.za/soer/reports/northwest/01%20Contents.pdf>.

<sup>75</sup> These environmental problems are evident from the NWP State of the Environment Report. See in this regard DACE *NWP State of the Environment Report*  
<http://www.environment.gov.za/soer/reports/northwest/01%20Contents.pdf>.

<sup>76</sup> These territories were established in terms of the *Self-governing Territories Constitution Act* 21 of 1971.

<sup>77</sup> The former TBVC states include: Transkei, Venda, Bophuthatswana and Ciskei.

<sup>78</sup> Du Plessis 1995 *South African Journal of Environmental Law and Policy* 23-24.

<sup>79</sup> Du Plessis 1995 *South African Journal of Environmental Law and Policy* 23-36.

<sup>80</sup> Du Plessis 1995 *South African Journal of Environmental Law and Policy* 28-36.

of district and local authorities are furthermore involved with environmental governance tasks.<sup>81</sup> Some of these authorities include DDLGH; chief air pollution officers responsible for governance tasks in terms of the APPA; and the DME, DWAF, SAHRA and DEAT.<sup>82</sup>

There is also currently no uniform legislation or policy to guide an integrated and streamlined environmental governance effort in the NWP. Due to a lack of capacity at provincial and local spheres of government, the diversification of government institutions, and the possible lack of commitment, infrastructure and human and financial resources, local and provincial governments are facing numerous challenges with regard to development and implementation responsibilities. It is specifically observed in this regard that lack of a clear, uniform and integrated system for the issuing of development authorisations in particular, and execution of environmental governance tasks in general, may inhibit the goal of the province to achieve sustainable governance results.<sup>83</sup>

### 3.2.3 *Reasons for fragmentation*

The reason for the existence of this fragmentation may be attributed to, *inter alia*, historical developments of the South African governmental sphere, especially insofar as it relates to South Africa's colonial and apartheid past.<sup>84</sup> Former colonies tend to

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<sup>81</sup> District and local municipalities constitute the local sphere of government, which functions alongside and under the support and coordination responsibility of the provincial government. The provincial government is to coordinate and support the actual implementation of developmental activities at municipal level and has demonstrated strong interest in integrating sustainability and environmental concerns in the provincial and local decision-making systems. However, the provincial departments responsible for such issues are lacking in technical capacity. District municipalities, on the other hand, have the responsibility for co-ordinating and supporting 'weaker' local municipalities in their development efforts. District and local municipalities are undergoing major restructuring as a result of the merging of earlier districts and local municipalities. The purpose of the merger is to increase the capacity of local governments by creating larger and more resourceful entities and to balance developmental disparities amongst historically advantaged and disadvantaged communities. However, even the resultant new district and local municipalities in many cases entirely lack the technical capacity to address environmental concerns in the development processes in their areas. Roles and responsibilities are also not always sufficiently clear, often causing long delays in decision-making. Centre for Environmental Management *Report on an Environmental Management System for the North-West Province* 354-356.

<sup>82</sup> Centre for Environmental Management *Report on an Environmental Management System for the North-West Province* 357.

<sup>83</sup> Centre for Environmental Management *Report on an Environmental Management System for the North-West Province* 354-357.

<sup>84</sup> Du Plessis 1995 *South African Journal of Environmental Law and Policy* 23-36.

replicate the judicial, executive, legislative and administrative structures of the former 'mother land'.<sup>85</sup> An imbalance is accordingly created because when these structures are imposed, they "...create a wide gulf between formal procedures and actual practices", resulting in fragmented structures, processes and governance efforts.<sup>86</sup> Developing countries such as South Africa, furthermore inherited fragmented and uncoordinated legislation that paid little thought to sustainability and an integrated, ecosystem-orientated legal regime that permits a holistic view of the ecosystem and of the inter-relationships and interactions within it.<sup>87</sup> Rather than advocating sustainability and an integrated approach to environmental management and governance, past practices, legislation, and policies were essentially concerned with the facilitation of resource allocation and resource exploitation.<sup>88</sup>

In environmental context, South Africa furthermore does not have a centralised lead agent to directly control environmental matters in an integrated fashion.<sup>89</sup> This is because the DEAT does not assume the role of a strong, centralised lead agent that has total control over all environmental matters.<sup>90</sup> The DEAT rather acts as a coordinator by providing framework guidance.<sup>91</sup> It is emphasised in this regard, that fragmentation is a direct result of South Africa's decentralised environmental governance structure.<sup>92</sup> This is contrary to centralisation endeavours elsewhere in the world. Bray<sup>93</sup> points out in this regard that international trends, such as the American and Australian approaches, favour the centralisation of powers with regard to environmental administration and that appeals have been made for the integration and administration of environmental affairs by the national sphere of government.

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<sup>85</sup> Sharkansky *Public Administration* 32.

<sup>86</sup> Sharkansky *Public Administration* 32.

<sup>87</sup> Du Plessis and Nel 2001 *South African Journal of Environmental Law and Policy* 2.

<sup>88</sup> Du Plessis and Nel 2001 *South African Journal of Environmental Law and Policy* 2.

<sup>89</sup> Centre for Environmental Management *Report on an Environmental Management System for the North-West Province* 64, and Nel and Du Plessis 2001 *South African Journal of Environmental Law and Policy* 26-27.

<sup>90</sup> Lawrence 1999 *South African Journal of Environmental Law and Policy* 62, furthermore highlights the difficulties faced by the DEAT by stating that the department "...has had to jostle for attention and resources. It has not been a prestigious portfolio in Cabinet, nor has it been a department that commanded a large slice of the national budget".

<sup>91</sup> Kotzé "Co-operative Environmental Governance" 168, and Du Plessis and Nel 2001 *South African Journal of Environmental Law and Policy* 26-27.

<sup>92</sup> Glazewski *Environmental Law* 129-132, and Glazewski *Environmental Law in South Africa* 105-107. It should furthermore be noted in this context that the aim of reforms addressing fragmentation, is not to surrender the duty by DEAT as the lead agent to make a decision. It is rather to reduce duplication and inconsistency between various competences.

<sup>93</sup> Bray 1995 *SA Public Law* 181.

A further problem that may cause fragmentation is possible confusion created by environmental legislation with regard to competencies. Disputes may for example arise because of the competencies listed in schedules 4 and 5 to the 1996 Constitution, read with the definition of 'environment' in the NEMA.<sup>94</sup> For example, national government departments have custodianship over natural resources. Therefore, aspects such as minerals, the marine environment, and inland water resources are not listed in schedules 4 and 5, although they are integral components of the environment as defined in the NEMA, and identified as a concurrent national and provincial competency.<sup>95</sup> Confusion may thus arise as to which government sphere, or line functionary, is responsible for which functional area.<sup>96</sup>

Glazewski<sup>97</sup> further notes that a reason for fragmentation may be attributed to the very nature of environmental management. Environmental management namely seeks to encompass a vast variety of considerations such as, *inter alia*, natural resources, cultural resources, pollution control, land use planning and waste management.<sup>98</sup> It is accordingly a broadly defined concept that has to fit within the narrowly defined functional areas of government.<sup>99</sup> This may create further confusion and essentially gives rise to a real need for coordination, co-operation and integration.

The problem of fragmentation is exacerbated by the 1996 Constitution that established nine provinces.<sup>100</sup> This leads to geographical fragmentation where jurisdictions do not always correlate with legislative mandates. It may also lead to the

<sup>94</sup> Bosman, Kotzé and Du Plessis 2004 *SA Public Law* 411-421, Glazewski *Environmental Law* 132-141, Glazewski *Environmental Law in South Africa* 109-117, and Bray 2005 *Journal of Contemporary Roman-Dutch Law* 361-363. It is also stated that the current constitutional dispensation entrenches semi-federalism which does not further integration of current fragmented legislation, and fragmented regulatory control. See in this regard Bond and Stein *Environmental and Water Management* 332.

<sup>95</sup> Bosman, Kotzé and Du Plessis 2004 *SA Public Law* 411-421, Glazewski *Environmental Law* 132-141, and Glazewski *Environmental Law in South Africa* 109-117.

<sup>96</sup> It has even been stated in this regard that chapter 5 of the NEMA that provides for IEM, "...amplifies asymmetry in an already terribly uneven regulatory and administrative environment". Bond and Stein *Environmental and Water Management* 332. This view accords with the contention of Glazewski *Environmental Law* 131 and Glazewski *Environmental Law in South Africa* 108, that environmental management as it currently exists in South Africa may give rise to further fragmentation because of the all-encompassing nature thereof.

<sup>97</sup> Glazewski *Environmental Law* 131 and Glazewski *Environmental Law in South Africa* 108.

<sup>98</sup> See also paragraphs 2.6 above and 3.5 below.

<sup>99</sup> Glazewski *Environmental Law* 131, and Glazewski *Environmental Law in South Africa* 108.

<sup>100</sup> Section 103 of the 1996 Constitution. See also Du Plessis 1995 *South African Journal of Environmental Law and Policy* 23-36, for an in-depth discussion.

encroachment of various environmental departments, or line functionaries, into the jurisdictional areas of line functionaries and departments that are not principally responsible for environmental governance. Glazewski<sup>101</sup> observes in this regard that the various provincial departments of environmental affairs that function under the coordination of DEAT "...have no consistent or logical home in the new provinces and in each case environmental affairs finds itself with some odd bed-fellows".<sup>102</sup>

It has been noted that the land use and planning regime in South Africa is also fragmented.<sup>103</sup> There may be a number of reasons for this fragmentation. Prior to the new constitutional dispensation in South Africa, governance in relation to land use was essentially concerned with development of the former white areas, whilst a 'crude and rudimentary planning system' applied in the historically African areas.<sup>104</sup> The emphasis was on social engineering, rather than on sustainable environmental governance results.<sup>105</sup> Past practices pertaining to land use and planning were accordingly significantly influenced by the apartheid ideology with largely unsustainable consequences. It has been observed in this regard that past land use practices were essentially control-orientated, rather than development-orientated; reactive rather than pro-active; and blueprint-orientated rather than process-orientated.<sup>106</sup> The result is that the current land use and planning framework is to a large extent fragmented, unequal and incoherent.<sup>107</sup>

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<sup>101</sup> Glazewski *Environmental Law* 130, and Glazewski *Environmental Law in South Africa* 107.

<sup>102</sup> Further confusion is attributed to the fact that nature conservation is in some instances located in a different department than the environmental departments that are traditionally deemed to be responsible for executing environmental management functions. Glazewski *Environmental Law* 130, Glazewski *Environmental Law in South Africa* 107, and Du Plessis 1995 *South African Journal of Environmental Law and Policy* 23-36.

<sup>103</sup> See paragraph 3.2.2.3 above.

<sup>104</sup> Glazewski *Environmental Law* 231, and Glazewski *Environmental Law in South Africa* 197. It has been observed in this regard that "The apartheid city, although fragmented along racial lines, integrated an urban economic logic that systematically favoured white urban areas at the cost of black urban and peri-urban areas". See in this regard *Fedsure Life Assurance v Greater Johannesburg Transitional Metropolitan Council* 1998 12 BCLR 1458 (CC). See also Claassen and Milton *Land-use Planning* 718-738 for a comprehensive discussion on the pre-1994 land use dispensation.

<sup>105</sup> The first EIA regulations were for example only introduced in 1995.

<sup>106</sup> Claassen and Milton *Land-use Planning* 716.

<sup>107</sup> Glazewski *Environmental Law* 232, and Glazewski *Environmental Law in South Africa* 197.

### 3.3 *Organisational behaviour*

#### 3.3.1 *Introduction*

Fragmentation of environmental governance efforts are exacerbated by unco-operative and inefficient administrative practices in state departments. Turf wars between environmental departments and officials, lack of human and financial resources, and administrative inefficiencies are some of the concerns that hamper effective service-delivery by government in general.<sup>108</sup> Further concerns include the existence of bureaucracy, irrational decision-making and factors inherent to the administrative systems of developing countries.<sup>109</sup>

Evidence suggests that the current administrative environment relating to environmental governance efforts in South Africa and the NWP may not be conducive for sustainable integration reforms.<sup>110</sup> A number of specific problems are experienced in South African and NWP environmental departments. Subsequent paragraphs reflect on some of these problems.

#### 3.3.2 *The South African scenario*

The first problem relates to lack of human and financial capacity and resources. Bray<sup>111</sup> observes in this regard that:

There is a general lack of resources (both financial and human) in South Africa that prohibits the proper implementation and enforcement of environmental legislation and policy.

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<sup>108</sup> See paragraph 2.4 above, and Centre for Environmental Management *Report on an Environmental Management System for the North-West Province* 201-203, 353-374.

<sup>109</sup> See paragraph 2.4 above, and Centre for Environmental Management *Report on an Environmental Management System for the North-West Province* 201-203, 353-374.

<sup>110</sup> A number of unstructured interviews and workshops were held by the author and Esme Snyman, Centre for Environmental Management, North-West University, Potchefstroom Campus, with government officials, academia, authorisation applicants from industry, and other experts involved in environmental governance in South Africa. These interviews took place in Durban, Port Elizabeth, Cape Town, KwaZulu Natal, Pretoria, Gauteng and Pretoria. The aim of this empirical study was to, *inter alia*, determine the nature and extent of problems experienced with service-delivery in the environmental administration of the national governmental sphere. The results have been reported in Centre for Environmental Management *Report on an Environmental Management System for the North-West Province* 201-203, 353-374. See also in this regard, Snyman "Towards Co-operative Governance in the North-West Province" 295-302, and Kotzé "Co-operative Environmental Governance" 166-174.

<sup>111</sup> Bray 2005 *Journal of Contemporary Roman-Dutch Law* 370.

Financial resources for environmental affairs are limited, particularly in the provincial and local spheres of government where environmental departments are grouped together with other departments, often without their own individual budgets.

Moreover, many government officials do not have the necessary capacity and competence to evaluate the information provided to them in, for example, authorisation applications.<sup>112</sup> They are afraid of exposure, because they are legally accountable for their decisions in terms of the *Promotion of Administrative Justice Act* 3 of 2000. This means that they have to be able to give reasons for the decisions they reach. Thus, officials ask for additional information before they process the authorisation application to avoid making a decision. This causes unnecessary time delays.<sup>113</sup> Time delays are also caused by the fact that the relevant authorities do not comment or respond timeously, or do not respond at all. An additional problem is the high turnover rate of personnel. Officials that were trained for a specific project are either reassigned or resign themselves in search of better future prospects. The responsibility for projects is thus not handed over properly to another official, which results in further time delays.<sup>114</sup>

In addition to the problems of a lack of capacity and unnecessary time delays, inadequate financial and human resources are further problems of concern. Often a lack of political buy-in is the reason why inadequate financial and human resources are made available for issues concerning the environment.<sup>115</sup>

Authorisation processes are also time-consuming and expensive, especially insofar as the public participation component is concerned. Government departments and officials furthermore find it difficult to identify all relevant stakeholders and to disseminate relevant information to all stakeholders.<sup>116</sup> A related problem is inadequate consultation and communication, not only between the different spheres of

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<sup>112</sup> Bray 2005 *Journal of Contemporary Roman-Dutch Law* 370 emphasises the challenges with regard to human resources by stressing that "...environmental affairs cover a diverse field of study and require a range of technical knowledge, expertise and skills from officials and administrators".

<sup>113</sup> Centre for Environmental Management *Report on an Environmental Management System for the North-West Province* 202.

<sup>114</sup> Centre for Environmental Management *Report on an Environmental Management System for the North-West Province* 202.

<sup>115</sup> Centre for Environmental Management *Report on an Environmental Management System for the North-West Province* 202.

<sup>116</sup> Centre for Environmental Management *Report on an Environmental Management System for the North-West Province* 202.



government and government departments, but also within government departments themselves. Lack of communication is often not a result of poor working relationships, but may be attributed to lack of human resources and time constraints. Spatial proximity between different authorities is another cause of insufficient communication. Limited resources and budgets are also not used optimally. There is a great deal of duplication between departments and institutions that are not consulting and co-operating with each other. There is also duplication within the administrative processes of several departments themselves.<sup>117</sup>

Problems experienced by government officials are exacerbated by incompetent environmental consultants. Many consultants are not qualified to do EIAs or specialist studies. In many instances, for example, an exemption from an EIA could have been applied for, but a comprehensive EIA is done instead. This increases the workload of the relevant government departments.<sup>118</sup>

There is also a multiplicity of authorisations and permits to apply for from various authorities. Information on which authorities and permits to apply for, and from which authorities, are not readily available and it is furthermore difficult to locate the relevant and applicable legislation. There is a lack of post-decision follow-up and monitoring and in some instances where the developer fails to comply with legislation, no remedies are provided for to rectify the situation. A further problem in this regard is lack of resources and capacity to enforce legislation and monitor implementation of authorisation requirements.<sup>119</sup>

### 3.3.3 *The NWP scenario*

Evidence furthermore suggests that there are a number of deficiencies within the environmental administration of the NWP.<sup>120</sup> The current environmental

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<sup>117</sup> Centre for Environmental Management *Report on an Environmental Management System for the North-West Province* 202.

<sup>118</sup> Centre for Environmental Management *Report on an Environmental Management System for the North-West Province* 202.

<sup>119</sup> Centre for Environmental Management *Report on an Environmental Management System for the North-West Province* 202-203.

<sup>120</sup> A number of unstructured interviews and workshops were held by the author and Esme Snyman, Centre for Environmental Management, North-West University, Potchefstroom Campus, with government officials, academia, authorisation applicants from industry, and other experts involved in

authorisation system is time-consuming and officials do not deem themselves accountable for their actions. Time delays are consequently a significant concern for authorisation applicants due to the cost implications involved. Time delays are generally attributed to lack of mutual understanding and communication between the different departments. Lack of administrative infrastructure, human and financial resources, as well as administrative bottlenecks are also some of the primary causes of delays.<sup>121</sup> A further cause of time delays may be attributed to inter-departmental and inter-governmental uncertainty about the delineation of mandates, roles and duties. The rapid turnover rate of staff in provincial departments results in projects not being handed over properly, which constitutes a serious lack of continuity as well as causing further delays of applications.<sup>122</sup>

There are no, or little, existing formal government-initiated tools or structures to facilitate appropriate contact with relevant officials in departments. Apart from the generally available guideline documents for some authorisation processes, no other guideline and information documents exist to guide applicants and government officials through the various application processes.<sup>123</sup> It is also evident that departments have different authorisation requirements for similar authorisations from different applicants. In this regard, inconsistency is apparent from the fact that a single department deals differently with the various sectors contained in one industrial sector. This creates confusion as well as loss of time and money.<sup>124</sup>

Environmental conservation considerations furthermore create the wrong impression with developers and some politicians. It is seen as contra-development. Each provincial department holds a different view with regard to environmental

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environmental governance in the NWP. These interviews took place in Vryburg, Potchefstroom, Mafikeng, Rustenburg and Klerksdorp. The aim of this empirical study was to, *inter alia*, determine the nature and extent of problems experienced with service-delivery in the environmental administration of the provincial and local spheres. The results have been reported in Centre for Environmental Management *Report on an Environmental Management System for the North-West Province* 201-203, 353-374. See also in this regard, Snyman "Towards Co-operative Governance in the North-West Province" 295-302, and Kotzé "Co-operative Environmental Governance" 166-174.

<sup>121</sup> Centre for Environmental Management *Report on an Environmental Management System for the North-West Province* 368.

<sup>122</sup> Centre for Environmental Management *Report on an Environmental Management System for the North-West Province* 368.

<sup>123</sup> Centre for Environmental Management *Report on an Environmental Management System for the North-West Province* 368.

<sup>124</sup> Centre for Environmental Management *Report on an Environmental Management System for the North-West Province* 368.

considerations in the NWP. Accordingly, mandates with regard to the environment are interpreted differently.<sup>125</sup>

There is no communication or co-operation between the different departments due to the existence of different mandates, priorities and interests. No formal mechanism for communication and co-operation exists between the departments.<sup>126</sup> In the event that co-operation is achieved, it is mainly attributed to the initiatives of individuals. Different departments also do not have sufficient understanding and knowledge of one another's activities. Duplication of processes and activities is accordingly a recurring concern. These challenges are exacerbated because no internal guidelines with regard to how internal administration should be conducted exist.<sup>127</sup>

#### *3.3.4 Reasons for bureaucratic behaviour in South Africa and the NWP*

The various general reasons set out in chapter 2 above also influence behavioural patterns by the public administration in South Africa and the NWP.<sup>128</sup> Several other specific factors may however also influence the current administrative behavioural patterns in South Africa and the NWP.

Public administration in the national, provincial and local spheres, including the environmental administration, seems to be in a state of flux with continual transformation at the order of the day. Theunissen<sup>129</sup> observes in this regard that:

...the present public service in South Africa is the result of the amalgamation of the various public services that existed in South Africa in the recent past, including those from the former TBVC states...and the former self-governing territories. This amalgamation did not

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<sup>125</sup> Centre for Environmental Management *Report on an Environmental Management System for the North-West Province* 369.

<sup>126</sup> There is a lack of existing memoranda of understanding between the different departments. In the event that these memoranda do exist, the success of these agreements is questionable because it is not a legally enforceable and binding instrument.

<sup>127</sup> Centre for Environmental Management *Report on an Environmental Management System for the North-West Province* 369.

<sup>128</sup> These include: political unresponsiveness; power struggles; administrative incapability; administrative insensitivity of officials; abuse of decision-making powers; turf protection; officiousness and frailty; administrative self-promotion; procedural rigmarole and subjectivity; lack of accountability; irrational decision-making; inhibitions and inadequacies of individual officials; structural difficulties inherent in the administrative organ; deviant behaviour of individual officials; and characteristics inherent to the public administration in developing countries. See paragraph 2.4 above.

<sup>129</sup> Theunissen *Administering National Government* 116.

only involve structures and personnel but also included the merging of various, often diverse, pieces of legislation, codes, management practices, as well as rules and regulations.

The eventual aim of transformation endeavours is to improve the overall efficiency of public administration and service-delivery through, amongst others, transformation of service-delivery efforts, rationalisation and restructuring, human resources development and training, institution-building and management, and promotion of a professional service ethic.<sup>130</sup> Although these may all be considered noble objectives, current behavioural patterns in the environmental governance sphere and administration may arguably be considered a result of these continual transformation strategies.

Another factor that may influence administrative behavioural patterns may be attributed to fragmentation of the environmental governance sphere itself. It has been indicated that fragmentation gives rise to duplication and overlap of jurisdictions, processes and procedures.<sup>131</sup> There is accordingly no integrated and well-established legislative or organisational base for the execution of governance efforts. Instead, fragmentation leads to time-consuming and costly delays which, in turn, inhibit effective and sustainable service-delivery efforts by government officials involved in the overall environmental governance effort.

### *3.3.5 Some results of bureaucratic behaviour in South Africa and the NWP*

The practical implication of bureaucratic behaviour discussed above, is that in most instances, matters relating to a single activity or sector, are governed by more than one organ of state in different spheres of government, each with their own administrative arrangements, processes and requirements. This arrangement results in confusion and inefficiencies as multiple authorisations are required for a single activity, product or service from different organs of state, each with their own process, information requirements, delivery times, and the nature and extent of conditions set.<sup>132</sup> Often conflicting requirements exist, while almost all of the competent

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<sup>130</sup> Theunissen *Administering National Government* 116-117. See further Theunissen *Administering National Government* 145.

<sup>131</sup> See paragraphs 2.3 and 3.2 above.

<sup>132</sup> Centre for Environmental Management *Report on an Environmental Management System for the North-West Province* 38. See also paragraph 2.4 above.

authorities fail to institute effective post-authorisation follow-up and monitoring programmes.<sup>133</sup> Those organs of state that do specify monitoring and reporting of performance in terms of conditions, do so in an uncoordinated fashion, often prescribing different procedures, requirements and report formats. The data and information generated are seldom shared between relevant authorities, while the trans-media transfer of impacts is often not addressed.<sup>134</sup> Developers in some instances not informed timeously of which applications need to be prepared and submitted. The result may either be illegal operations or applications that are submitted too late to inform a development project effectively. Developers also find it difficult to meet all requirements, as not all competent authorities have information packages available that clearly explain all the requirements.<sup>135</sup>

These are only a few examples of the negative effects of the current bureaucratic and unco-operative behaviour in environmental departments. It is argued that a more serious consequence is that current administrative behavioural patterns may ultimately inhibit the achievement of sustainable environmental governance results.

### **3.4 CEG in South Africa and the NWP**

#### **3.4.1 Introduction**

Despite the problem of fragmentation and current unsustainable administrative behavioural patterns in environmental departments, there are a number of initiatives, or mechanisms, available to address these challenges. One of these initiatives is co-operative governance, which is firmly entrenched in South African law. Provisions on co-operative governance are found in, amongst others, the 1996 Constitution, environmental framework legislation, environmental sectoral acts, and the *Inter-Governmental Relations Framework Act* 13 of 2005.<sup>136</sup>

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<sup>133</sup> Centre for Environmental Management *Report on an Environmental Management System for the North-West Province* 38. See also paragraph 2.4 above.

<sup>134</sup> Centre for Environmental Management *Report on an Environmental Management System for the North-West Province* 38. See also paragraph 2.4 above.

<sup>135</sup> Centre for Environmental Management *Report on an Environmental Management System for the North-West Province* 38. See also paragraph 2.4 above.

<sup>136</sup> The IRFA must be read with the provisions of the *Public Services Laws Amendment Act* 47 of 1997. This act has been promulgated in terms of sections 195(3)-(6) of the 1996 Constitution and is primarily aimed at regulating the public service including incidences of unfitness of, and misconduct by,

Co-operative governance is a general term that is applicable to all governance efforts in South Africa, whilst CEG refers to co-operative governance practices in environmental context.<sup>137</sup> Whilst previous paragraphs investigated the theoretical foundations of CEG, subsequent paragraphs reflect on this concept as it is specifically provided for in South African law.

#### 3.4.2 *The need for CEG in South Africa and the NWP*

The structure of a state is one of the factors that determine which sphere of government is responsible for which specific governance activities.<sup>138</sup> South Africa is a unitary state with federal characteristics, which means that specific spheres and line functionaries of government are responsible for the execution of predetermined governance tasks.<sup>139</sup> The governance structure is thus decentralised.<sup>140</sup> Decentralisation and fragmentation are especially prevalent in the environmental governance sphere.<sup>141</sup> This devolved structure necessitates inter-governmental relations in the context of a co-operative form of federalism, since various dynamic relationships exist between all role-players and stakeholders in government.<sup>142</sup> Whereas national, provincial and local spheres in South Africa are required to co-operate with one another, this equally applies to the various departments in each sphere and government officials in all the spheres and departments.<sup>143</sup> Inter-

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government officials. The Act is also based on the values and principles governing the public administration set out in section 195(1). As such, it is aimed at achieving an efficient administration, free of corruption and misconduct. See also paragraph 3.4.6 below.

<sup>137</sup> See paragraph 2.7 above.

<sup>138</sup> Theunissen *Administering National Government* 127.

<sup>139</sup> Theunissen *Administering National Government* 126. Bray 1995 *SA Public Law* 176 already pointed out at the time of the Interim Constitution that "...upon closer examination one finds that the 'federal elements' of our constitutional structure which results in a division of environmental affairs between different levels of government, may cause far-reaching consequences for the development of a cohesive system of environmental law and environmental management."

<sup>140</sup> Reddy 2001 *Politeia* 23-24.

<sup>141</sup> See chapter 2 and paragraph 3.2 above. See also Bray 1995 *SA Public Law* 171-185 for a discussion of fragmentation in the Interim Constitution era.

<sup>142</sup> See paragraph 2.7 above, and Theunissen *Administering National Government* 153. This co-operative form of 'federalism', pre-empts sharing of the same responsibilities by different spheres and line functionaries of government. De Waal, Currie and Erasmus *Bill of Rights Handbook* 23. Sharkansky *Public Administration* 273 notes that federalism in this context explains the situation where the inputs to an administrative organ, is sometimes the outputs of another administrative organ in a different sphere or line functionary of government. Co-operative governance thus offers the impetus for governance based on participation and co-operation in mutual and reciprocal relationships, in order to facilitate the process where the activities of one administrative organ may affect those of another. See also Bray 1999 *South African Journal of Environmental Law and Policy* 3 in this regard.

<sup>143</sup> Chapter 3 of the 1996 Constitution.

governmental relations means the conduct of affairs between different public sector institutions in a vertical (between the different spheres of government) and horizontal (between the different departments or line functionaries in each sphere) sense.<sup>144</sup> Co-operative governance in South African context is the mechanism, or strategy, that may be employed to facilitate acceptable and sustainable inter-governmental relations.<sup>145</sup> The argument accordingly seems to be that co-operative governance is based on the decentralised governance structure, "...and that the three spheres working harmoniously together are more likely to address challenges than if they were acting on their own or alternatively in competition with one another".<sup>146</sup>

### 3.4.3 *Constitutional provisions on CEG*

Chapter 3 of the 1996 Constitution contains provisions on co-operative governance. Sections 40(1)-(2) provide that whilst the South African government consists of distinctive national, provincial and local spheres, these spheres are inter-dependent and inter-related and must observe and adhere to the constitutional provisions on co-operative governance. All governance activities must further be conducted within the parameters of chapter 3.<sup>147</sup> Chapter 3 primarily aims to "...shape the attitudes of the levels [sic] of government to fit the co-operative model of federalism" that exists in South Africa.<sup>148</sup> Whilst evidence suggests that the current attitude of, especially governmental bodies responsible for the environment, is less than favourable, section 41 provides for more detailed obligations that should be employed to reshape prevailing attitudes and unco-operative governance practices.<sup>149</sup> Section 41 provides that:

All spheres of government and all organs of state within each sphere must -  
(a) preserve the peace, national unity and the indivisibility of the Republic;  
(b) secure the well-being of the people of the Republic;

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<sup>144</sup> Besdziek *Provincial Government* 191, and Nel and Du Plessis 2001 *South African Journal of Environmental Law and Policy* 21. This definition correlates with the definition of inter-governmental relations in the IRFA. Section 1 of the Act states that inter-governmental relations means the relationships that arise between different governments or between organs of state from different governments in the conduct of their affairs.

<sup>145</sup> Bray 2005 *Journal of Contemporary Roman-Dutch Law* 368-369.

<sup>146</sup> Reddy 2001 *Politeia* 26.

<sup>147</sup> See also Bray 2005 *Journal of Contemporary Roman-Dutch Law* 359-361.

<sup>148</sup> De Waal, Currie and Erasmus *Bill of Rights Handbook* 24.

<sup>149</sup> See paragraphs 2.4 and 3.3 above.

- (c) provide effective, transparent, accountable and coherent government for the Republic as a whole;
- (d) be loyal to the Constitution, the Republic and its people;
- (e) respect the constitutional status, institutions, powers and functions of government in the other spheres;
- (f) not assume any power or function except those conferred on them in terms of the Constitution;
- (g) exercise their powers and perform their functions in a manner that does not encroach on the geographical, functional or institutional integrity of government in another sphere; and
- (h) co-operate with one another in mutual trust and good faith by -
  - (i) fostering friendly relations;
  - (ii) assisting and supporting one another;
  - (iii) informing one another of, and consulting one another on, matters of common interest;
  - (iv) co-ordinating their actions and legislation with one another;
  - (v) adhering to agreed procedures; and
  - (vi) avoiding legal proceedings against one another.<sup>150</sup>

It may be derived from the foregoing that although each sphere and line function of government retains its unique character, they are precluded from acting independently. Instead, spheres and line functions are required to co-operate in mutual trust and good faith based on inter-related and coordinated mutual and reciprocal relationships.<sup>151</sup> The constitutional provisions on co-operative governance furthermore presuppose a three-tiered relationship. Co-operation must take place in a horizontal sense (within each sphere between, for example, the legislative and executive branches of provincial government and between different departments); vertically (between all three spheres of government and between the various departments in each sphere); and between a sphere and organ of state that is not part of that particular sphere.<sup>152</sup> Although the South African government is fragmented along autonomous and independent spheres and line functionaries, all spheres and line functions are connected by way of co-operative governance.<sup>153</sup> It may accordingly be deduced that constitutional provisions on co-operative governance provide a balance between self-rule and shared-rule, in order to create a more efficient administration through associations and partnerships.<sup>154</sup>

<sup>150</sup> See also Bray 1999 *South African Journal of Environmental Law and Policy* 2-3.

<sup>151</sup> Bray 1999 *South African Journal of Environmental Law and Policy* 3.

<sup>152</sup> Burns *Administrative Law* 45.

<sup>153</sup> Burns *Administrative Law* 41.

<sup>154</sup> Bray 1999 *South African Journal of Environmental Law and Policy* 4. Lawrence 1999 *South African Journal of Environmental Law and Policy* 61-61 states in this regard that:

Partnerships between, among and within the national, provincial and local spheres of government, in conjunction with organs of civil society, is a defining characteristic of the South African version of intergovernmental relations seen as integral to democratic rule.



The constitutional provisions relating to the South African governmental structure continually use 'spheres' rather than 'levels' of government. It is argued that this mainly attempts to move away from the past held notion that there exists a hierarchical order between spheres that is more, or less powerful than another tier.<sup>155</sup> Furthermore, it is not an indication that a governmental structure is described which relates to:

...the old traditional stratified three-tier system of a central government at the top (and therefore the strongest), a second provincial tier in the middle and a local tier (the weakest) at the bottom.<sup>156</sup>

It rather strives to describe the very nature of co-operative governance where different spheres are individually but jointly responsible for different functions. The different spheres of government should accordingly operate in unison, since they are essentially inter-locked in a relationship of equality and support,<sup>157</sup> which is based on a non-hierarchical governance system where each self-reliant sphere is afforded equal status and allowed the "...constitutional flexibility to define and express its unique character".<sup>158</sup>

Environmental governance is a good example of an instance where it is required of all three spheres and line functions of government to establish and enforce legislative measures pertaining to a single and shared subject matter, namely, the environment. The competency to oversee matters that relate to the environment is thus shared between the different spheres and line functionaries on the basis that each sphere and line function is responsible for the particular governance tasks that suit best its structure, resources, reach, dimension and nature.

The significance of the provisions on co-operative governance expand on above, is apparent from the need that this co-operative form of federalism should be coordinated. The provisions of chapter 3 of the 1996 Constitution are not meant to

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<sup>155</sup> Carpenter "Co-operative Government" 49, Glazewski *Environmental Law* 128, Glazewski *Environmental Law in South Africa* 105-106, and Bray 1999 *South African Journal of Environmental Law and Policy* 4. Sharkansky *Public Administration* 305 also notes with regard to superior and inferior levels of government that it is "...an oversimplification to assume that the involvement of a superior level of administration permits that organization to control its subordinate associates".

<sup>156</sup> Carpenter "Co-operative Government" 51.

<sup>157</sup> Besdziej *Provincial Government* 171.

<sup>158</sup> Reddy 2001 *Politeia* 24.

diminish the power of one organ of state at the expense of another.<sup>159</sup> Rather, it presupposes and emphasises the willingness by all spheres of government to work together. For this to materialise, it is essential that conflict between laws is avoided, and the administration of the implementation of these laws is clearly regulated by way of coordination.<sup>160</sup> This exposition correlates with Prince's<sup>161</sup> explanation, that for the greatest efficiency of government "...co-operative government requires a high degree of mutual trust and common understanding, correlated action by several or perhaps even thousands of legislative bodies, and considerable voluntary support from private individuals or institutions".

The constitutional provisions on co-operative governance are especially significant for governance activities relating to the environment. Schedules 4 and 5 of the 1996 Constitution designate the environment as a functional area where national and provincial spheres have concurrent legislative competence.<sup>162</sup> Because it is envisaged that conflict may arise due of this shared competence, it is especially significant that the provisions on co-operative governance must be invoked to address such conflict. Co-operative governance obliges organs of state to avoid litigation against one another in the instance that a dispute may arise. Where one or more of the parties to legal proceedings is an organ of state, there exists a duty on such organs to foster and utilise co-operative governance to address the conflict.<sup>163</sup> Organs of state are thus required to avoid legal proceedings against each other,<sup>164</sup> and should exhaust all other remedies before approaching a court to resolve the dispute.<sup>165</sup> If a court is not satisfied that the requirements of section 41(3) have been met, it may refer a dispute back to the organs of state involved.<sup>166</sup> The Court, in *Uthukela District Municipality*

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<sup>159</sup> Bray 2005 *Journal of Contemporary Roman-Dutch Law* 369 emphasises the need to achieve a balance between 'self rule' and 'shared rule' which means that although one sphere of government is not more 'powerful' than another, it is a fact that some environmental matters are better dealt with by certain spheres of government.

<sup>160</sup> De Waal, Currie and Erasmus *Bill of Rights Handbook* 24.

<sup>161</sup> Prince *Democratic Administration* 75.

<sup>162</sup> Bray 2005 *Journal of Contemporary Roman-Dutch Law* 361-363.

<sup>163</sup> See, for example, *Uthukela District Municipality and Others v President of the Republic of South Africa and Others* 2003 1 SA 678 (CC) at 368G.

<sup>164</sup> Section 41(h)(vi).

<sup>165</sup> Section 41(3).

<sup>166</sup> *Uthukela District Municipality and Others v President of the Republic of South Africa and Others* 2003 1 SA 678 (CC) at 684B.

*and Others v President of the Republic of South Africa and Others*,<sup>167</sup> stated that because of the importance of co-operative governance, it would only on rare occasions adjudicate an inter-governmental dispute, and would only do so if organs of state had exhausted all available remedies, and made every reasonable effort to resolve the dispute at political level.<sup>168</sup>

Constitutional provisions on co-operative governance also aim to avoid the encroachment of one sphere or department on the jurisdiction of another. 'Jurisdiction' in this sense includes the geographical, functional and institutional integrity of each sphere and line function.<sup>169</sup> In terms of these provisions, the current turf-wars arising from the protection of mandates and jurisdictions may even be deemed unconstitutional.<sup>170</sup>

Co-operative governance does however not only entail co-operation, coordination and alignment of governance tasks. The emphasis of the constitutional provisions is also on capacity building, support and assistance.<sup>171</sup> This must be facilitated by way of supportive practices between the various spheres and line functions of government.<sup>172</sup> Another feature of co-operative governance is sharing of expertise, experience and information, in order to improve service-delivery efforts.<sup>173</sup> This may be particularly relevant for the NWP, since provincial and local government must be supported by national government, and *vice versa*.<sup>174</sup> Evidence, however, suggests that current trends in the environmental administration do not further sharing of expertise, information and experience.<sup>175</sup>

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<sup>167</sup> *Uthukela District Municipality and Others v President of the Republic of South Africa and Others* 2003 1 SA 678 (CC) at 684C.

<sup>168</sup> See also *Ex Parte Chairperson of the Constitutional Assembly: In re Certification of the Amended Text of the Constitution of RSA, 1996* 1997 2 SA 744 (CC).

<sup>169</sup> Section 41(g).

<sup>170</sup> See paragraphs 2.4 and 3.3 above.

<sup>171</sup> Bray 2005 *Journal of Contemporary Roman-Dutch Law* 368-371.

<sup>172</sup> Section 41(h). See further Bray 1999 *South African Journal of Environmental Law and Policy* 4-5 and Burns *Administrative Law* 42.

<sup>173</sup> Section 41(h)(ii)-(iii). . It may be derived from these provisions that co-operative governance also encapsulates co-operative governance strategies and practices with the public. This may be referred to as management, or governance, by outsiders. The object of management by outsiders entails the empowerment of civil society in terms of governance, and it allows for co-operative agreements between the environmental lead agent (in South African context the DEAT), other environmental authorities, and the private sector. See further Nel and Du Plessis 2001 *South African Journal of Environmental Law and Policy* 11.

<sup>174</sup> See paragraph 3.2.2.5 above.

<sup>175</sup> See paragraphs 2.4 and 3.3 above.

Chapter 10 of the 1996 Constitution, which sets out the basic values and principles governing the public administration, supports the constitutional provisions on co-operative governance.<sup>176</sup> These values and principles include, amongst others, that: a high standard of professional ethics must be promoted and maintained; that efficient, economic and effective use of resources must be promoted; that the public administration must be development-oriented; that services must be provided impartially, fairly, equitably and without bias; that people's needs must be responded to, and the public must be encouraged to participate in policy-making; that the public administration must be accountable; that transparency must be fostered by providing the public with timely, accessible and accurate information; and that good human-resource management and career-development practices, to maximise human potential, must be cultivated.<sup>177</sup>

It may be derived from the foregoing that the constitutional provisions on co-operative governance may play an important role in addressing fragmentation in South Africa and the NWP. The reasons for this may be summarised as follows. Although the various spheres and line functions of government are independent, they are constitutionally linked by the obligation of co-operative governance; because one sphere of government participates in the governance activities of another, this co-operation and interaction is an ongoing process; co-operative governance requires support and assistance between the various spheres and line functionaries; and co-operative governance practices must, as a penultimate objective, ensure delivery of better services to the public.<sup>178</sup> It may be derived from the foregoing that the importance of constitutional provisions relating to co-operative governance for the establishment of sustainable environmental governance efforts should not be underestimated. Bray<sup>179</sup> states in this regard that:

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<sup>176</sup> See also for a further discussion, Bray 2005 *Journal of Contemporary Roman-Dutch Law* 363. These principles and values apply to the administration in every sphere of government, organs of state, and public enterprises. See section 195(2). Co-operative governance is further supported by the doctrine of delegation of powers to other spheres of government. See for example sections 238, 44(1)(a)(iii), 104(1)(c), 99, and 126. See also Burns *Administrative Law* 44.

<sup>177</sup> Section 195(1)(a)-(h), and Burns *Administrative Law* 40-41. The NEMA furthermore provides for the application of these principles and values in environmental context by, *inter alia*, requiring public participation in decision-making, access to environmental information and administrative justice in section 2 thereof. See further Bray 2005 *Journal of Contemporary Roman-Dutch Law* 363-364.

<sup>178</sup> Burns *Administrative Law* 42-43.

<sup>179</sup> Bray 1999 *South African Journal of Environmental Law and Policy* 2.

...co-operative governance...may be regarded as the backbone of integrated environmental management [or governance] in a constitutionally transformed South Africa.

#### 3.4.4 *Environmental framework legislation and CEG*

The NEMA gives effect to the constitutional provisions on co-operative governance in environmental context. This is evident from the long title of the act which states that one of its primary aims is to provide for CEG by establishing principles for decision-making on matters affecting the environment, institutions that will promote co-operative governance and procedures for coordinating environmental functions exercised by organs of state.<sup>180</sup> In the absence of a single statutory instrument which comprehensively codifies and integrates environmental law in South Africa,<sup>181</sup> this is a noble, albeit ambitious aim. Couzens<sup>182</sup> observes in this regard that:

The intention [of the NEMA] is therefore present to remedy the criticism often levelled at environmental legislation to date, that of fragmentation of legislation with responsibility for administering environmental law being distributed amongst various government organs.

The NEMA acts as environmental framework legislation and, as such, conforms to the new form of public administration and governance which should be based on the constitutional imperative of co-operative governance.<sup>183</sup> Reflecting on the importance of the NEMA in establishing CEG, Nel and Du Plessis<sup>184</sup> propose that:

One of the main features of NEMA is the attempt to achieve co-operative governance between different line functions in the international context as well as between same and different spheres of government.<sup>185</sup>

The NEMA accordingly shows sensitivity for the establishment of CEG by way of international and inter-regional alignment, the promotion of intra-governmental co-operation, the creation of co-operative governance structures, the establishment of procedures and principles for co-operation, and the establishment of opportunities for

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<sup>180</sup> Long title of the NEMA.

<sup>181</sup> Rabie *Environment Conservation Act* 99.

<sup>182</sup> Couzens 1999 *South African Journal of Environmental Law and Policy* 14.

<sup>183</sup> Lawrence 1999 *South African Journal of Environmental Law and Policy* 61. For a comprehensive discussion on the role of the NEMA as environmental framework legislation, see Nel and Du Plessis 2001 *South African Journal of Environmental Law and Policy* 1-37.

<sup>184</sup> Nel and Du Plessis 2001 *South African Journal of Environmental Law and Policy* 35.

<sup>185</sup> See also Bray 1999 *South African Journal of Environmental Law and Policy* 10-12 for a discussion on the importance of the NEMA in establishing CEG.

management by outsiders.<sup>186</sup> This is done by way of various provisions and principles that relate to CEG.<sup>187</sup> Certain institutions and mechanisms are also established in terms of the NEMA that should further CEG. Subsequent paragraphs reflect on these provisions.

#### 3.4.4.1 NEMA principles relating to CEG

Chapter 1 of the NEMA contains a set of environmental management principles, which constitutes the foundation of all activities to be undertaken in terms of the provisions of the Act. These principles apply throughout South Africa to actions, or governance efforts and activities, of all spheres of government and all line functions.<sup>188</sup> One of the objects of the principles is to guide decision-making and actions of environmental authorities throughout their governance tasks.<sup>189</sup>

Section 2(4)(b) requires environmental management, or governance, to be integrated, by acknowledging that all elements of the environment are linked and inter-related. This may entail that where decision-making necessitates cross-sectoral or inter-governmental action, that such decisions not only be integrated, but that they must also reflect consultation with all relevant departments that may be involved in each particular case. Section 2(4)(f) states, *inter alia*, that participation of all interested and affected parties in environmental governance must be promoted, and all people must have the opportunity to develop the understanding, skills and capacity necessary for achieving equitable and effective participation. This provision arguably relates not only to individuals and groups outside government, but also to government officials in the ranks of government whose skills, understanding and capacity must be developed

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<sup>186</sup> Nel and Du Plessis 2001 *South African Journal of Environmental Law and Policy* 21-25.

<sup>187</sup> Bray 1999 *South African Journal of Environmental Law and Policy* 9-10.

<sup>188</sup> Section 2(1).

<sup>189</sup> Sections 2(1)(a)-(e) state that the principles apply alongside all other appropriate and relevant considerations, including the State's responsibility to respect, protect, promote and fulfil the social and economic rights in chapter 2 of the 1996 Constitution and in particular the basic needs of categories of persons disadvantaged by unfair discrimination; serve as the general framework within which environmental management and implementation plans must be formulated; serve as guidelines by reference to which any organ of state must exercise any function when taking any decision in terms of the Act or any statutory provision concerning the protection of the environment; serve as principles by reference to which a conciliator appointed under the Act must make recommendations; and guide the interpretation, administration and implementation of the Act, and any other law concerned with the protection or management of the environment. See further Bray 1999 *South African Journal of Environmental Law and Policy* 7.

in such a way as to promote effective participation in governance tasks. The principles further explicitly state that there must be inter-governmental coordination and harmonisation of policies, legislation and actions relating to the environment.<sup>190</sup> Actual or potential conflicts of interest between organs of state should furthermore be resolved through conflict resolution procedures.<sup>191</sup>

#### 3.4.4.2 Institutions responsible for CEG

Chapter 2 of the NEMA provides for the establishment of the National Environmental Advisory Forum (NEAF) which is representative of all relevant stakeholders in environmental governance.<sup>192</sup> The NEAF has as its main objective to act as an advisory body for the Minister of DEAT on matters pertaining to environmental management and governance by setting objectives and priorities for environmental governance.<sup>193</sup> Although not explicitly stated, these objectives and priorities may also include any matter relating to the achievement of CEG.<sup>194</sup>

Section 7 of the NEMA establishes the Committee for Environmental Coordination (hereafter the CEC).<sup>195</sup> The CEC is the primary institution responsible for the achievement of CEG in terms of the NEMA. The CEC is responsible for scrutinising, reporting and making recommendations on environmental implementation plans,<sup>196</sup> and investigating and making recommendations regarding the assignment and delegation of functions between organs of state under the NEMA or any other law affecting the environment and regarding the practical working arrangements, including memoranda of understanding (hereafter MOU), between the organs of state represented by members and other organs of state.<sup>197</sup> The CEC is also responsible for

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<sup>190</sup> Section 2(4)(l).

<sup>191</sup> Section 2(4)(m).

<sup>192</sup> Section 3 and Glazewski *Environmental Law* 170, and Glazewski *Environmental Law in South Africa* 142-143.

<sup>193</sup> Section 3(1)-3(2). See also Bray 1999 *South African Journal of Environmental Law and Policy* 7.

<sup>194</sup> Further objectives of the NEAF include: to inform the Minister of the views of stakeholders regarding the application of the principles set out in section 2; and to advise the Minister on any matter concerning environmental management and governance, specifically by setting and achieving objectives and priorities for environmental governance; and appropriate methods of monitoring compliance with the principles set out in section 2. Section 3(2).

<sup>195</sup> Bray 1999 *South African Journal of Environmental Law and Policy* 7 and Glazewski *Environmental Law* 170, and Glazewski *Environmental Law in South Africa* 142-143.

<sup>196</sup> See paragraph 3.4.4 above.

<sup>197</sup> Sections 7(3)(a)-(b).

investigating and recommending the establishment of mechanisms in each province, for providing a single point for the receipt of applications for authorisations, licences and similar permissions required for activities under legal provisions concerned with the protection of the environment. The CEC will specifically become involved where such authorisations, licences or permissions are required from more than one organ of state, and procedures for the coordinated consideration of such applications by the organs of state are required.<sup>198</sup> The CEC is further mandated to make recommendations to coordinate the application of IEM as contemplated in chapter 5 of the NEMA, including co-operation in EIA procedures and requirements and making determinations regarding the prevention of duplication of activities required in terms of chapter 5.<sup>199</sup> Further tasks include: making recommendations aimed at securing compliance with the principles set out in section 2 and national norms and standards contemplated in section 146(2)(b)(i) of the 1996 Constitution; making recommendations regarding the harmonisation of the environmental functions of all relevant national departments and spheres of government; advising the Minister on providing guidelines for the preparation of environmental management plans and environmental implementation plans;<sup>200</sup> and endeavouring to ensure compliance with the principles set out in section 2(2) by making appropriate recommendations, requiring reports from its members and advising government on law reform.<sup>201</sup>

#### 3.4.4.3 Mechanisms to facilitate CEG

Chapter 3 of the NEMA provides for procedures, or mechanisms, to facilitate CEG.<sup>202</sup> These mechanisms include environmental implementation plans (hereafter EIP) and environmental management plans (hereafter EMP). It is required of every national department listed in schedule 1 to the NEMA who exercises functions which may affect the environment and every province, to prepare an EIP within one year of the

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<sup>198</sup> Section 7(3)(c).

<sup>199</sup> Section 7(3)(d).

<sup>200</sup> See paragraph 3.4.4 above.

<sup>201</sup> Sections 7(3)(e)-(h). It may be derived from the foregoing that the CEC constitutes a real and practical option to achieve and enforce CEG. The establishment of the CEC may be of significant importance for the practical and day-to-day establishment, execution, regulation and facilitation of CEG. See chapter 7 below.

<sup>202</sup> Bray 1999 *South African Journal of Environmental Law and Policy* 7, Glazewski *Environmental Law* 170-175, and Glazewski *Environmental Law in South Africa* 143-147.



promulgation of the NEMA and at least every four years thereafter.<sup>203</sup> It is furthermore required of every national department listed in schedule 2 as exercising functions involving the management of the environment, to prepare an EMP within one year of the promulgation of the NEMA, and at least every four years thereafter.<sup>204</sup> An EMP and EIP may also be consolidated.<sup>205</sup>

The purpose of EIPs and EMPs is to coordinate and harmonise environmental policies, plans, programmes and decisions of the various national departments that exercise functions that may affect the environment, or who are entrusted with powers and duties aimed at the achievement, promotion, and protection of a sustainable environment, including provincial and local spheres of government, in order to minimise the duplication of procedures and functions. EIPs and EMPs must also promote consistency in the exercise of functions that may affect the environment; give effect to the principle of co-operative governance in chapter 3 of the 1996 Constitution; secure the protection of the environment across the country as a whole; prevent unreasonable actions by provinces in respect of the environment that are prejudicial to the economic or health interests of other provinces or the country as a

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<sup>203</sup> Section 11(1). An EIP must include: a description of policies, plans and programmes that may significantly affect the environment; a description of the manner in which the relevant national department or province will ensure that the policies, plans and programmes will comply with the principles set out in section 2 as well as any national norms and standards as envisaged under section 146(2)(b)(i) of the 1996 Constitution which have as their objective the achievement, promotion, and protection of the environment; a description of the manner in which the relevant national department or province will ensure that its functions are exercised so as to ensure compliance with relevant legislative provisions, including the principles set out in section 2, and any national norms and standards envisaged under section 146(2)(b)(i) of the 1996 Constitution and set out by the Minister, or by any other Minister, which have as their objective the achievement, promotion, and protection of the environment; and recommendations for the promotion of the objectives and plans for the implementation of the procedures and regulations referred to in chapter 5 of the NEMA. See section 13.

<sup>204</sup> Section 11(2). An EMP must contain: a description of the functions exercised by the relevant department in respect of the environment; a description of environmental norms and standards, including norms and standards contemplated in section 146(2)(b)(i) of the 1996 Constitution, set or applied by the relevant department; a description of the policies, plans and programmes of the relevant department that are designed to ensure compliance with its policies by other organs of state and persons; a description of priorities regarding compliance with the relevant department's policies by other organs of state and persons; a description of the extent of compliance with the relevant department's policies by other organs of state and persons; a description of arrangements for co-operation with other national departments and spheres of government, including any existing or proposed MOUs entered into, or delegation or assignment of powers to other organs of state, with a bearing on environmental management; and proposals for the promotion of the objectives and plans for the implementation of the procedures and regulations referred to in chapter 5 of the NEMA. See section 14. The following EMPs and EIPs, amongst others, have been published in the *Government Gazette*: GN R354 published in *Government Gazette* No. 23232, 28 March 2002. GN R 249 published in *Government Gazette* No. 22022, 16 February 2001.

<sup>205</sup> Section 11(3).

whole; and enable the Minister of DEAT to monitor the achievement, promotion, and protection of a sustainable environment.<sup>206</sup> Because the primary aim of EIPs and EMPs is to facilitate CEG, these instruments may also contribute significantly to oblige environmental authorities to consider the environmental implications of their administrative actions.<sup>207</sup>

CEG in terms of the NEMA arguably not only refers to co-operation at national level, but also to co-operation at international and regional levels. CEG at international and regional levels entails incorporation of international environmental law as framework law into domestic law, and provision of mechanisms to ensure co-operation and integration between different national governments.<sup>208</sup> Chapter 6 of the NEMA provides for co-operative governance at international and regional levels. Whilst the incorporation of international law is primarily regulated by the 1996 Constitution,<sup>209</sup> the NEMA contains specific provisions relating to the incorporation of international environmental law into South African law.<sup>210</sup> These provisions may arguably not only enable comprehensive incorporation of international environmental law into the domestic legal regime, but it may also facilitate and promote co-operation with other governments at international and regional levels.<sup>211</sup>

Chapter 8 provides for environmental management co-operation agreements (hereafter EMCAs).<sup>212</sup> The Minister, provincial and local authorities, may enter into an EMCA with any person or community for the purpose of promoting compliance with the section 2 principles of environmental management.<sup>213</sup> An EMCA is primarily aimed at enhancing partnerships with all relevant interested and affected parties in order to achieve more effective involvement in governance activities.<sup>214</sup> This is done by way of adopting a "...co-operative and participative approach to

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<sup>206</sup> Section 12.

<sup>207</sup> Couzens 1999 *South African Journal of Environmental Law and Policy* 17.

<sup>208</sup> Nel and Du Plessis 2001 *South African Journal of Environmental Law and Policy* 8-9.

<sup>209</sup> See, for example, sections 39 and 231-233 of the 1996 Constitution.

<sup>210</sup> Sections 25-27.

<sup>211</sup> Nel and Du Plessis 2001 *South African Journal of Environmental Law and Policy* 21.

<sup>212</sup> See also Glazewski *Environmental Law* 186-187, Glazewski *Environmental Law in South Africa* 158, Bosman, Kotzé and Du Plessis 2004 *SA Public Law* 411-421, and Hanks 1998 *South African Journal of Environmental Law and Policy* 298-354.

<sup>213</sup> Section 35(1).

<sup>214</sup> Bray 1999 *South African Journal of Environmental Law and Policy* 8-9.

environmental management, rather than a coercive and regulatory approach as has been the case in the past".<sup>215</sup>

#### 3.4.4.4 Conflict resolution

The NEMA furthermore provides for comprehensive conflict resolution measures in those instances that conflict does arise between spheres and line functions of government.<sup>216</sup>

Section 17(1) provides in this regard that the Minister of DEAT, relevant Member of the Executive Council (hereafter MEC) or Municipal Council may, before reaching a decision, consider the desirability of first referring the matter to conciliation where a difference or disagreement arises concerning the exercise of any of its functions which may significantly affect the environment, or before whom an appeal arising from a difference or disagreement regarding the protection of the environment is brought under any law. The matter may then be referred to the Director-General of DEAT for conciliation under the NEMA, a conciliator may be appointed, or another conciliation or mediation process in terms of any other relevant law may be followed. Only when it is clear that the conciliation or mediation process has failed, may a decision be made by the Minister, MEC or Municipal Council.<sup>217</sup>

Anyone may further request the Minister, a MEC, or Municipal Council to appoint a facilitator to call and conduct meetings of interested and affected parties with the purpose of reaching an agreement, or to refer a difference or disagreement to conciliation in terms of the NEMA.<sup>218</sup> The Minister, MEC or Municipal Council may, subject to section 22, appoint a facilitator and determine the manner in which the facilitator must carry out his or her tasks, including provision of time-limits.<sup>219</sup> It is also provided that a court or tribunal hearing a dispute regarding the protection of the environment, may order the parties to submit the dispute to a conciliator appointed by the Director-General in terms of the NEMA and suspend the proceedings pending the

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<sup>215</sup> Glazewski *Environmental Law* 187, and Glazewski *Environmental Law in South Africa* 158.

<sup>216</sup> Bray 1999 *South African Journal of Environmental Law and Policy* 7-8, Glazewski *Environmental Law* 155-156, and Glazewski *Environmental Law in South Africa* 126-128.

<sup>217</sup> Sections 17(1)(b)(i)-(ii).

<sup>218</sup> Section 17(2).

<sup>219</sup> Section 17(2).

outcome of the conciliation.<sup>220</sup> Further provisions deal with specific procedures in the event of the matter being referred to conciliation and arbitration.<sup>221</sup>

### 3.4.5 *Some principal sectoral acts and CEG*

Apart from constitutional and environmental framework law that provide for principles, institutions and mechanisms to achieve CEG, a number of sectoral acts, also provide for certain measures to facilitate CEG.<sup>222</sup> The primary provisions relating to CEG of some of these principal acts in South Africa are discussed below.

#### 3.4.5.1 National Water Act 36 of 1998

The NWA contains a number of provisions that relate to CEG. Chapter 2, part 1, provides for the national water resource strategy (hereafter the NWRS) which must be determined by the Minister of DWAF. The NWRS is binding on all authorities and institutions exercising powers or performing duties under the NWA. It must contain, *inter alia*, objectives for the establishment of institutions to undertake water resource management; a determination of the inter-relationship between institutions involved in water resource management; and ways in which to promote the management of catchments within a water management area in a holistic and integrated manner.<sup>223</sup> Chapter 7 deals with the establishment of catchment management agencies (hereafter CMA).<sup>224</sup> Section 79(4)(b) requires that a CMA must, in performing its duties, strive towards achieving co-operation and consensus in managing the water resources under its control. Chapter 10 contains international obligations in terms of the NWA. It is specifically provided that the Minister may establish bodies to implement international agreements in respect of management and development of water

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<sup>220</sup> Section 17(3).

<sup>221</sup> Sections 18-20. If arbitration is to be the dispute resolution method, the *Arbitration Act* 42 of 1965 will also be applicable.

<sup>222</sup> Other acts that also provides for CEG include: the *Marine Living Resources Act* 18 of 1998, and the *National Forests Act* 84 of 1998.

<sup>223</sup> Sections 6(j)-6(l).

<sup>224</sup> The purpose of establishing these agencies is to delegate water resource management to the regional or catchment level and to involve local communities, within the framework of the NWRS established in terms of Chapter 2.

resources shared with neighbouring countries, and to further regional co-operation.<sup>225</sup> Special procedures for appeals and conflict resolution are also provided.<sup>226</sup>

#### 3.4.5.2 Water Services Act 108 of 1997

The significance of CEG is also evident from the *Water Services Act* 108 of 1997 (hereafter the WSA). The preamble to the WSA acknowledges that there is a duty on all spheres of government to ensure that water-related services are provided in a manner that is efficient, equitable and sustainable. This duty should however be performed, whilst observing and adhering to the principles of co-operative governance.<sup>227</sup> All spheres of government have a duty in terms of the WSA, within the limits of physical and financial feasibility, to work towards this objective. Section 3(1), in addition, states that everyone has a right of access to basic water supply and basic sanitation. Section 3(2) and section 3(3) oblige all water service institutions to take all reasonable measures to realise these rights. It is argued, in this context, that reasonable measures may also include measures pertaining to the establishment and promotion of CEG. The WSA further provides for water boards, which have as their main function the provision of water to other water service institutions.<sup>228</sup> It is significant in this regard that other activities of a water board may also include the provision of management services, training and other support services to water services institutions, in order to promote co-operation in the provision of water services.<sup>229</sup>

#### 3.4.5.3 National Environmental Management: Biodiversity Act 10 of 2004

One of the objectives of the *National Environmental Management: Biodiversity Act* 10 of 2004 (hereafter the NEMBA) is to provide for co-operative governance in biodiversity management and conservation; and to provide for the South African

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<sup>225</sup> Sections 102-108.

<sup>226</sup> Chapter 15 establishes the Water Tribunal to hear appeals against certain decisions made by a responsible authority, CMA or water management institution under the NWA.

<sup>227</sup> Preamble.

<sup>228</sup> Section 29.

<sup>229</sup> Section 30(2)(a).

National Biodiversity Institute to assist in achieving the objectives of the Act.<sup>230</sup> Section 39 provides in this respect for the formulation of a national biodiversity framework which must provide for an integrated, coordinated and uniform approach to biodiversity management by organs of state in all spheres of government, non-governmental organisations, the private sector, local communities, other stakeholders, and the public.<sup>231</sup>

A novel approach to CEG is to be found in section 92 of the NEMBA which concerns the issuing of integrated permits relating to biodiversity resources. This section provides that, if a related authorisation is required in terms of another law, the authority empowered under that other law to authorise that activity,<sup>232</sup> and the issuing authority empowered under the NEMBA to issue permits in respect of that activity, may exercise their respective powers jointly. In this instance the authorities are empowered to issue a single integrated permit instead of individual permits and authorisations.<sup>233</sup> The provisions on an integrated authorisation may be regarded as an explicit attempt to foster CEG by way integration of administrative procedures and tools for environmental regulation.

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<sup>230</sup> Sections 2(c)-2(d). The Minister may to this end, for example, enter into biodiversity management plans with the public or organs of state. These plans must conform to EIPs and EMPs in terms of chapter 3 of the NEMA. In order to achieve CEG, it is further provided that an organ of state that must prepare an EIP or EMP in terms of chapter 3 of the NEMA, must align its plan with the national biodiversity framework and any applicable bioregional plan; incorporate into that plan those provisions of the national biodiversity framework or a bioregional plan that specifically apply to it; and demonstrate in its plan how the national biodiversity framework and any applicable bioregional plan may be implemented by that organ of state or municipality. See sections 44, 45, and 48. Also see paragraph 3.4.4 above. The NEMBA must be read with the *Genetically Modified Organisms Act* 15 of 1997 which also provides for CEG. Sections 5(j) and 5(k) provide that the Executive Council of Genetically Modified Organisms may co-operate or enter into agreements with any person or institution upon such conditions as the Council and the person or institution concerned may agree upon. The Council may also promote co-operation between the Republic and any other country with regard to research, development and technology transfer in the field of the GMOs. See also Kotzé and Du Plessis "Domestic Biodiversity Protection" 17-19.

<sup>231</sup> Section 39(1)(a). The framework must also address regional co-operation on issues concerning biodiversity management in Southern Africa. Section 39(1)(d).

<sup>232</sup> Section 92(2) provides that an authority empowered under another law, may issue an integrated permit for the activity in question if that authority is designated in terms of the NEMBA also as an issuing authority for permits in respect of that activity.

<sup>233</sup> An integrated permit may be issued only if the relevant provisions of the NEMBA and the other law have been complied with; if the permit specifies the provisions in terms of which it has been issued; and if it specifies the authority or authorities that have issued it. Section 92(3).

#### 3.4.5.4 Mineral and Petroleum Resources Development Act 28 of 2002

The *Mineral and Petroleum Resources Development Act 28 of 2002* (hereafter the MPRDA) does not explicitly provide for CEG. This may be indicative of the trend to safeguard decision-making mandates and entice turf wars that exist between environmental departments. Du Plessis<sup>234</sup> terms this 'usurping of the environmental mandate' where government departments, in this instance DME and DEAT, monopolise issues regarding the environment within their own departmental sphere.

The only provision in the MPRDA that indirectly relate to co-operative governance is the closure certificate that is issued after closure of mining operations. According to section 43 of the Act, a closure certificate may only be issued when the Chief Inspector, Mining, and the DWAF have confirmed in writing that health, safety and water pollution have been addressed adequately.<sup>235</sup> It is however not provided how this co-operation should be facilitated. Other provisions of the MPRDA also indirectly relate to CEG. Section 37, for example, states that the NEMA section 2 principles which espouse CEG, serve as guidelines for the interpretation, administration and implementation of the environmental requirements of the MPRDA. It may be derived from this provision that environmental framework law provisions on CEG will also be applicable to all environmental governance tasks performed in terms of the MPRDA. Section 40 also provides that when considering an environmental management plan or environmental management programme in terms of section 39 of the MPRDA, the Minister must consult with any state department which administers any law relating to matters affecting the environment. The Minister must request the head of a department being consulted, in writing, to submit the comments of that department within 60 days from the date of the request.<sup>236</sup> Chapter 5 further provides for the establishment of the Minerals and Mining Development Board. One of the functions of the Board is to advise the Minister on any matter which must be referred to the Board in terms of the MPRDA, including; dispute resolution; reporting to the Minister on any matter relating to the

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<sup>234</sup> Du Plessis "Legal Mechanisms for Co-operative Governance" 6-7, 12.

<sup>235</sup> Where a mining operation is to be scaled down or where employees will be retrenched, consultation must be effected by the Minister of DME with the Minister of Labour regarding the socio-economic and labour implications of the matter. See section 52.

<sup>236</sup> Section 40(2).

application of the Act; and enquiring into, and report to the Minister on any matter concerning the objects of the Act.<sup>237</sup> These functions may arguably include matters connected with CEG.

#### 3.4.5.5 National Nuclear Regulator Act 47 of 1999

The *National Nuclear Regulator Act* 47 of 1999 (hereafter the NNRA) makes express provision for CEG.<sup>238</sup> Section 6(1) provides that, to give effect to the principles of co-operative governance and inter-governmental relations, all organs of state on which functions in respect of the monitoring and control of radioactive material or exposure to ionizing radiation are conferred by the NNRA or other legislation, must co-operate with one another. Co-operation must have as its objective to ensure the effective monitoring and control of a nuclear hazard; to coordinate the exercise of such functions; to minimise the duplication of such functions and procedures regarding the exercise of such functions; and to promote consistency in the exercise of such functions.<sup>239</sup> The National Nuclear Regulator must conclude a co-operative agreement with every relevant organ of state to give effect to CEG in this regard.<sup>240</sup>

#### 3.4.5.6 Local Government: Municipal Demarcation Act 27 of 1998

The *Local Government: Municipal Demarcation Act* 27 of 1998 addresses CEG in terms of geographical demarcation of municipal boundaries. Section 25 provides that

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<sup>237</sup> Section 58.

<sup>238</sup> The *Nuclear Energy Act* 46 of 1999 must be read with the NNRA. Section 13(c) provides that one of the aims of the South African Nuclear Energy Corporation Ltd, is to co-operate with any person or institution in matters falling within these functions subject to the approval of the Minister.

<sup>239</sup> Sections 6(1)(a)-6(1)(d).

<sup>240</sup> Section 6(2). The Minister must furthermore, after consultation with the board and in consultation with the Ministers responsible for the relevant organs of state, make regulations regarding time periods and procedures, including procedures for public participation and mechanisms for dispute resolution, in respect of the conclusion of co-operative agreements referred to in subsection (2); matters that must be provided for in co-operative agreements, including, but not limited to, provision for time periods for the implementation of co-operative agreements; the coordination of the functions referred to in subsection (1) in a manner that avoids unnecessary duplication and omissions regarding safety requirements and the issuing of conflicting instructions; measures to be taken in the event of non-compliance with a co-operative agreement; and dispute resolution in respect of the interpretation or application of co-operative agreements referred to in subsection (2). Some regulations have been published in terms of these provisions. See, for example, Draft Regulations on Co-operative Governance in respect of the Monitoring and Control of Radioactive Materials or Exposure to Ionizing Radiation, GN 79 in *Government Gazette* 23428 of 24 May 2002; and Draft Co-operative Agreement between the national Nuclear Regulator, the Department of Water Affairs and Forestry, and the Department of Labour, GN 1826 in *Government Gazette* 26732 of 27 August 2004.



some of the factors to be taken into account when determining municipal boundaries, include, the need for cohesive, integrated and nonfragmented areas;<sup>241</sup> the need for coordinated municipal, provincial and national programmes and services;<sup>242</sup> and the need to rationalise the total number of municipalities within different categories and of different types, to achieve the objectives of effective and sustainable service-delivery, financial viability and macro-economic stability.<sup>243</sup> These provisions on co-operative governance may be particularly relevant for facilitating more co-operative, integrated and aligned environmental governance efforts in the local sphere of government.<sup>244</sup>

#### 3.4.5.7 Local Government: Municipal Structures Act 117 of 1998

The *Local Government: Municipal Structures Act* 117 of 1998 regulates the current structure of municipalities in South Africa. Section 86 provides for conflict resolution in the event that a dispute arises between a district and a local municipality concerning the performance of a function or the exercise of a power. It is stated that the MEC for local government in the province, after consulting them, may, by notice in the *Provincial Gazette*, resolve the dispute by defining their respective roles in the performance of that function or in the exercise of that power. Section 88 further provides that:

- (1) A district municipality and the local municipalities within the area of that district municipality must co-operate with one another by assisting and supporting each other.
- (2)(a) A district municipality on request by a local municipality within its area may provide financial, technical and administrative support services to that local municipality to the extent that that district municipality has the capacity to provide those support services.
- (b) A local municipality on request of a district municipality in whose area that local municipality falls may provide financial, technical and administrative support services to that district municipality to the extent that that local municipality has the capacity to provide those support services.
- (c) A local municipality may provide financial, technical or administrative support services to another local municipality within the area of the same district municipality to the extent that it has the capacity to provide those support services, if the district municipality or that local municipality so requests.
- (3) The MEC for local government in a province must assist a district municipality to provide support services to a local municipality.

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<sup>241</sup> Section 25(b).

<sup>242</sup> Section 25(i).

<sup>243</sup> Section 25(l).

<sup>244</sup> See paragraph 3.2.2.5 above.

These provisions may arguably further co-operative governance in the local sphere of government, especially insofar as they may be used to address conflicts that arise between local authorities responsible for environmental governance. These provisions may also facilitate greater support and assistance amongst local and provincial authorities responsible for executing environmental governance mandates.<sup>245</sup>

#### 3.4.5.8 Local Government: Municipal Systems Act 32 of 2000

The *Local Government: Municipal Systems Act 32 of 2000* (hereafter the LGMSA) is specifically aimed at empowering local government authorities.<sup>246</sup> With regard to co-operative governance, it emphasises the importance of, *inter alia*, a new system of local government, which requires an efficient, effective and transparent local public administration that conforms to constitutional principles.<sup>247</sup> These constitutional principles arguably include the principles established in the 1996 Constitution, which deal with co-operative governance.<sup>248</sup> The latter provision is strengthened even further by subsequent provisions in the preamble, which state that there is a need to create a more harmonious relationship between municipal councils, municipal administrations and local communities through the acknowledgement of reciprocal rights and duties. This may ultimately result in an efficient system of local government, which is capable of exercising the functions and powers assigned to it in, *inter alia*, a co-operative manner.

Section 3 of the LGMSA contains specific provisions pertaining to co-operative governance. It is argued that these provisions are provided for to, *inter alia*, serve as guideline principles for the sound facilitation of co-operative governance in the local government sphere. Section 3(1) states in this regard, that local government should exercise executive and legislative authority based on constitutional provisions of co-operative governance envisaged in section 41 of the Constitution.<sup>249</sup> It is also required that national and provincial spheres of government, must on their part,

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<sup>245</sup> See paragraph 3.2.2.5 above.

<sup>246</sup> Preamble of the LGMSA.

<sup>247</sup> Preamble of the LGMSA.

<sup>248</sup> See paragraph 3.4.3 above.

<sup>249</sup> See paragraph 3.4.3 above.

exercise executive and legislative authority in a manner that does not compromise or impede a municipality's ability or right to exercise its executive and legislative authority.<sup>250</sup> In order to achieve effective and well-established co-operative governance practices, local government authorities must, *inter alia*, develop common approaches for local government as a distinct sphere of government;<sup>251</sup> enhance co-operation, mutual assistance and sharing of resources among municipalities;<sup>252</sup> and facilitate compliance with the principles of co-operative governance and inter-governmental relations.<sup>253</sup>

The integrated development plans (hereafter IDP)<sup>254</sup> envisaged for local government by the LGMSA, also serve as an example of an available legislative measure to further co-operative governance.<sup>255</sup> By way of IDPs, local government should, in conjunction with other organs of state, contribute to the progressive realisation of the fundamental rights contained in, *inter alia*, section 24 of the 1996 Constitution.<sup>256</sup> Section 24(1) of the LGMSA furthermore states that planning undertaken by a municipality must be aligned with, and complement, the development plans and strategies of other affected municipalities and other organs of state. The need for alignment is significant to give effect to the principles of co-operative government contained in section 41 of the 1996 Constitution.<sup>257</sup> These provisions may be particularly significant insofar as they may be utilised to address unco-operative behavioural practices that currently exist in the local governmental sphere. They may also be relevant for establishing co-operative practices amongst environmental authorities in the local sphere of government.<sup>258</sup>

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<sup>250</sup> Section 3(2).

<sup>251</sup> Section 3(3)(a).

<sup>252</sup> Section 3(3)(b).

<sup>253</sup> Section 3(3)(d).

<sup>254</sup> Section 35(1)(a) states that an IDP is the principal strategic planning instrument, which guides and informs all planning and development, and all decisions with regard to planning, management and development within the jurisdiction of a local government authority.

<sup>255</sup> Chapter 5.

<sup>256</sup> Section 23(1)(c).

<sup>257</sup> See paragraph 3.4.4 above.

<sup>258</sup> See paragraph 3.2.2.5 above.

### 3.4.5.9 National Environmental Management: Air Quality Act 39 of 2004

The NEMAQA is one of the most recent environmental acts to have been promulgated. The NEMAQA implicitly makes provision for CEG.<sup>259</sup> Section 7 provides for the establishment of a national air quality framework which binds all organs of state in all spheres of government in terms of which responsibilities for the implementation of the Act may be assigned and delineated amongst different spheres of government and various organs of state.<sup>260</sup> Section 7(4) provides that an organ of state must give effect to the national framework when exercising a power or performing a duty in terms of the Act or any other legislation regulating air quality management. The national framework may furthermore differentiate between various geographical areas.<sup>261</sup> Section 15(1) also provides that each national department or province responsible for preparing an EIP or EMP in terms of chapter 3 of the NEMA, must include in that plan an air quality management plan.<sup>262</sup> Incorporation of air quality management plans in EIPs and EMPs, which function as mechanisms to promote CEG, may arguably contribute to enhance CEG.

### 3.4.5.10 National Environmental Management: Protected Areas Act 57 of 2003

The *National Environmental Management: Protected Areas Act* 57 of 2003 states as one of its aims to promote inter-governmental co-operation and public consultation in matters concerning protected areas.<sup>263</sup> Section 39(3) specifically provides that when preparing a management plan for a protected area, the management authority concerned must consult municipalities, other organs of state, local communities and other affected parties which have an interest in the area.<sup>264</sup> Section 42 provides for co-management agreements which may be entered into by the protected areas management authority and any organ of state, a local community, an individual, or

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<sup>259</sup> Chapter 6 of the Act contains provisions relating to international air quality management and transboundary air pollution. These provisions specifically provides for CEG at international and regional levels.

<sup>260</sup> Section 7(3).

<sup>261</sup> Section 7(5).

<sup>262</sup> See paragraph 3.4.4 above.

<sup>263</sup> Long title and section 2(b). Section 5 also states that the NEMA applies to this Act, including the provisions on co-operative governance and dispute resolution.

<sup>264</sup> A management plan must at least contain a coordinated policy framework and may contain provisions on financial and other support to ensure effective administration and implementation of a co-management agreement. See section 41.

any other party. A co-management agreement may provide for delegation of powers; financial and other support, to ensure effective administration and implementation of co-management agreements. It must also provide for harmonisation and integration of management of cultural heritage resources in the protected area by the management authority.<sup>265</sup>

#### 3.4.5.11 National Heritage Resources Act 25 of 1999

The *National Heritage Resources Act* 25 of 1999 (hereafter NHRA) aims to, *inter alia*, introduce an integrated and interactive system for the management of the national heritage resources; to promote good government at all levels; empower civil society to nurture and conserve their heritage resources so that they may be bequeathed to future generations; and to introduce an integrated system for the identification, assessment and management of the heritage resources of South Africa.<sup>266</sup> Section 12 provides for the establishment of the South African Heritage Resources Agency (hereafter SAHRA) which has as its principal objective to coordinate the identification and management of heritage resources.<sup>267</sup> Section 42 further provides for heritage agreements in terms of which, *inter alia*, aspects relating to CEG may be promoted.<sup>268</sup>

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<sup>265</sup> Sections 42(1)-42(3).

<sup>266</sup> Long title. Section 5 further contains principles of heritage management which include, amongst others, provisions on capacity building, integrated management strategies and co-operation. The NHRA must be read together with the *National Heritage Council Act* 11 of 1999. This act makes provision for the establishment of the National Heritage Council which must coordinate heritage management; and integrate living heritage with the functions and activities of the Council and all other heritage authorities and institutions at national, provincial and local level. Section 4.

<sup>267</sup> Section 13 assigns various duties to SAHRA, including the obligation to promote CEG.

<sup>268</sup> Evidence further suggests that CEG is promoted by way of alignment of the heritage impact assessment (hereafter HIA) and EIA processes where both are required for a proposed development. All proposed development projects must be reported to SAHRA prior to commencement of the development. The type of development is defined in section 38 of the NHRA. SAHRA usually reviews the scope of the development and decides whether a HIA is needed or not. If a HIA is required, the applicant must finalise such an assessment. The record of decision is then submitted to the relevant authority dealing with the EIA, which is in most instances the DEAT. The EIA and HIA may thus run consecutively in some instances. See further, Centre for Environmental Management *Report on an Environmental Management System for the North-West Province* 177-178. See also paragraph 3.4 above.

### 3.4.6 *Inter-governmental Relations Framework Act 13 of 2005*

The system of inter-governmental relations in South Africa has been in a state of continuous developing since 1994.<sup>269</sup> A national legal framework for the effective facilitation of inter-governmental relations is currently in the process of being developed. Section 42(2) of the 1996 Constitution states that an Act of Parliament must establish or provide for structures and institutions to promote and facilitate inter-governmental relations; and provide for appropriate mechanisms and procedures to facilitate settlement of inter-governmental disputes.<sup>270</sup> This act has recently been developed in the form of the *Inter-governmental Relations Framework Act 13 of 2005* (hereafter IRFA).<sup>271</sup> The Act may, in addition to the provisions on CEG discussed above, contribute to enhance the CEG effort in South Africa and the NWP. It is noted in this regard that, although the Act does not specifically relate to CEG, since it is a legislative framework that deals with co-operative governance and inter-governmental relations in general, it will also be applicable to environmental authorities. Subsequent paragraphs analyse some of the most significant provisions of the Act.

The long title of the IRFA states that the overall aim of the Act is to establish a framework for the national, provincial and local spheres of government to promote and facilitate inter-governmental relations; to provide for mechanisms and procedures to facilitate settlement of inter-governmental disputes; and to provide for matters incidental thereto. Specific objectives of the IRFA include: to provide, within the ambit of co-operative governance as established by the 1996 Constitution, a framework for the various spheres of government and all organs of state to facilitate coordination in the implementation of policy and legislation, including coherent government, effective provision of service, monitoring and implementation of policy and legislation; and realisation of national priorities.<sup>272</sup> The Act recognises that the South African governance framework is fragmented along three autonomous, yet,

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<sup>269</sup> For a comprehensive discussion, see Reddy 2001 *Politeia* 28-29.

<sup>270</sup> The Act recognizes that whereas various acts of Parliament already provide for co-operative governance (see, for example, paragraph 3.4.5 above), it is necessary to complement these acts by establishing a general legislative framework applicable to all spheres and to all sectors of government, to ensure the conduct of inter-governmental relations in the spirit of the 1996 Constitution. See the preamble. Hence, although not specifically stated, this general legislative framework will also apply to environmental authorities.

<sup>271</sup> Published in *Government Gazette* 27898 of 15 August 2005.

<sup>272</sup> Section 3.

inter-dependent and inter-related spheres; and that all spheres must provide effective, efficient, transparent, accountable and coherent governance in order to secure the well-being of people and the progressive realisation of their constitutional rights.<sup>273</sup> Further, that one of the most pervasive challenges facing government is redressing the legacies of apartheid and discrimination, which arguably includes the fragmented environmental governance effort in South Africa;<sup>274</sup> and that this challenge is best addressed through a concerted effort by all spheres of government to work together in the provision of services.<sup>275</sup> The Act also recognises that co-operation in government depends on a stable and effective system of governance for regulating the conduct of relations and the settlement of inter-governmental disputes.<sup>276</sup>

The Act applies to all spheres of government and to all organs, departments, or line functionaries that exist in these spheres.<sup>277</sup> The objectives of the Act should be promoted by taking into account the circumstances, material interests and budgets of other spheres of government and organs of state when exercising statutory powers or performing statutory functions.<sup>278</sup> Spheres of government and organs of state should also consult other affected organs in accordance with formal procedures provided by specific legislation or accepted convention.<sup>279</sup> Where no such procedures or convention exist, consultation should be in the manner best suited to the circumstances by way of direct contact or any relevant inter-governmental structures.<sup>280</sup> Other factors that must be taken into account when promoting the objectives of the Act include: coordinating actions when implementing policy or legislation affecting the material interests of other spheres of government and government organs; avoiding unnecessary and wasteful duplication or jurisdictional contests; taking all reasonable steps to ensure sufficient institutional capacity and

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<sup>273</sup> Preamble.

<sup>274</sup> See paragraph 3.2 above.

<sup>275</sup> Preamble.

<sup>276</sup> Preamble.

<sup>277</sup> Section 2(1).

<sup>278</sup> Section 4(a).

<sup>279</sup> Section 4(b).

<sup>280</sup> Sections 4(b)(i)-4(b)(ii).

effective procedures;<sup>281</sup> and participating in inter-governmental structures, including, for this purpose, the settlement of inter-governmental disputes.<sup>282</sup>

Chapter 2 provides for a number of inter-governmental structures that may be employed to establish co-operative governance. These include the President's Co-ordinating Council (hereafter the PCC); and inter-governmental forums in the national, provincial and local spheres of government. These forums act as a platform for inter-governmental consultation and discussion, and although they are not deemed to be executive decision-making bodies, they may adopt resolutions or make recommendations in terms of agreed procedures.<sup>283</sup> This may be a significant shortcoming when considering the overall aim and purpose of the Act. It is argued in this regard that, for effective and sustainable co-operative governance practices to be established, forums should be afforded executive decision-making powers in order to provide a sound legal base for the enforcement, monitoring, and continual improvement of co-operative governance practices.

The PCC further acts as a consultative forum for the President.<sup>284</sup> It is responsible to hear matters concerning local and provincial government; to consult local and provincial government on the implementation of national policy and legislation, and on the coordination and alignment of priorities, objectives and strategies across national, provincial and local spheres, as well as on other matters of strategic importance that affect the interests of other governments.<sup>285</sup> The Council must further discuss performance in the provision of services in order to detect failures and to initiate preventive or corrective action when necessary; and to consider reports from inter-governmental forums on matters affecting national interest and other reports dealing with the performance of provinces and municipalities.<sup>286</sup>

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<sup>281</sup> These measures may include to consult, co-operate and to share information with other organs of state; and to respond promptly to requests by other organs of state for the sake of consultation, co-operation and information sharing. See sections 4(e)(i)-4(e)(ii).

<sup>282</sup> Sections 4(c)-4(f).

<sup>283</sup> Section 29.

<sup>284</sup> The PCC consists of the President, the Deputy-President, the Minister in the Presidency, the relevant departmental Minister, the Cabinet member responsible for finance, the Cabinet member responsible for public service, the Premiers of the nine provinces, and a person designated by the national organisation representing organized local government. Section 5. The President is furthermore responsible for convening meetings and determining the agenda. Section 7.

<sup>285</sup> Sections 6(a)-6(b).

<sup>286</sup> Sections 6(c)-6(d).



Section 8 allows the possibility of establishing national inter-governmental forums (hereafter NIF).<sup>287</sup> Any Cabinet member may establish such a forum to promote and facilitate inter-governmental relations in the functional area for which that member is responsible.<sup>288</sup> Any MinMec<sup>289</sup> that existed with the promulgation of the IRFA will be regarded as a forum established in terms of section 8 of the Act.<sup>290</sup> A NIF acts as a consultative forum for the relevant Cabinet member responsible for the functional area for which the forum has been established.<sup>291</sup> Its role correlates with that of the PCC, and includes raising matters of national interest that also affects provincial and local government, to consult with local and provincial government, and to discuss performance in the provision of services in order to detect failures and to initiate preventive or corrective action.<sup>292</sup>

Section 15 provides for the establishment of provincial inter-governmental forums (hereafter PIF). A PIF acts as a consultative forum for the Premier of a province and will be responsible for the facilitation and promotion of inter-governmental relations between provincial and local government.<sup>293</sup> Apart from the PIF, the Premier of a

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<sup>287</sup> Section 9 determines that a NIF must consist of the Cabinet member responsible for the functional area for which the forum is established; any Deputy-Minister responsible for the functional area; relevant member of the Executive Council of provinces; and a person designated by the national organization representing organized local government. See section 9 in this regard.

<sup>288</sup> Section 8(1).

<sup>289</sup> 'MinMec' means a standing inter-governmental body consisting of at least a Cabinet member and members of the provincial Executive Councils responsible for the functional areas similar to those of the Cabinet member. See section 1. MinMecs are not constitutionally determined, but act as informal entities based on mutual trust and co-operation. These entities play an important role in inter-governmental co-operation. MinMecs are responsible for, amongst others, harmonization of legislation and programmes in the national sphere; division and employment of financial resources; consultation and negotiation regarding national norms and standards that are applicable to a specific function; transfer of information; undertaking of joint programmes and projects; and formulation and implementation of strategies. See further Reddy 2001 *Politeia* 31-32.

<sup>290</sup> Section 8(2).

<sup>291</sup> In terms of section 11, there is a duty on each forum to report back to the PCC. The Cabinet member responsible for the functional area for which the forum has been established may also refer a matter to the Budget Council or the Budget Forum established in terms of the *Inter-governmental Fiscal Relations Act* 97 of 1997.

<sup>292</sup> Sections 10(a)-10(c).

<sup>293</sup> Specific duties of these forums include discussion on matters of mutual interest, including, amongst others: implementation in the provinces of national policy and legislation; matters arising from the PCC and other NIFs that may affect the province; draft national policy and legislation relating to matters affecting the province; implementation of national policy and legislation with respect to such matters; development of provincial policy and legislation relating to such matters; coordination of provincial and municipal development planning to facilitate coherent planning in the province as a whole; coordination and alignment of strategic and performance plans, priorities, objectives and strategies of provincial and local governments in the province; and any matters of strategic importance that affect the interests of local governments in the province. The forums are also responsible to consider reports from other provincial forums and district inter-governmental forums. See section 17.

province may, in addition, establish a formal provincial inter-governmental forum for any specific functional area to promote and facilitate effective and efficient inter-governmental relations between provincial government and local governments.<sup>294</sup> The Act also provides for the establishment of inter-provincial forums where it is desirable to facilitate and promote inter-governmental relations between more than one province.<sup>295</sup>

Section 22 provides for the establishment of district inter-governmental forums (hereafter DIF). The aim of DIFs is to promote and facilitate inter-governmental relations between district and local municipalities. A DIF should serve as a consultative forum for district and local municipalities to discuss and consult each other on matters of mutual interest.<sup>296</sup> The Act also provides for the possibility of establishing inter-municipality forums between two or more municipalities in order to promote and facilitate inter-governmental relations between them.<sup>297</sup>

Chapter 2, part 5, provides for general matters, including the establishment of inter-governmental technical support structures,<sup>298</sup> consultation procedures with organised local government,<sup>299</sup> and internal procedures of inter-governmental structures.<sup>300</sup> Section 31 also provides that the Minister of Provincial and Local Government may by notice in the *Government Gazette*, issue standard internal rules for inter-governmental structures. These standard rules will however only apply to an inter-governmental structure if the structure formally adopts the rules, and to the extent, and subject to the modifications and qualifications determined by the inter-governmental structure.<sup>301</sup> Although these standard internal rules may be regarded as a positive development insofar as the promotion of co-operative governance is

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<sup>294</sup> Section 20.

<sup>295</sup> Section 21.

<sup>296</sup> Such matters may include, *inter alia*: draft national and provincial policy and legislation relating to matters affecting local government interests in the district; implementation of such policies and legislation; matters arising from the PCC that may affect the district; mutual support in terms of section 88 of the *Local Government: Municipal Structures Act* 117 of 1998; provision of services in the district; coherent planning and development in the district; coordination and alignment of the strategic and performance plans and priorities, objectives and strategies of the municipalities in the district; and any other matters of strategic importance which affect the interests of the municipalities in the district. Section 24.

<sup>297</sup> Section 26.

<sup>298</sup> Section 27.

<sup>299</sup> Section 28.

<sup>300</sup> Section 30.

<sup>301</sup> Section 31(2).

concerned, it may be argued that their effect will be rendered pointless if an inter-governmental structure decides, based on its discretion to adopt and modify the rules, not to adopt them.

The Act further provides for certain mechanism, or procedures, that relates to co-operative governance and inter-governmental relations.<sup>302</sup> Section 31(1) provides in this regard that where the implementation of a policy, the exercise of a statutory power, the performance of a statutory function, or the provision of a service depends on the participation of organs of state in different spheres of government, those organs must coordinate their actions in such a manner as may be appropriate or required in the circumstances, and may do so by entering into an implementation protocol. An implementation protocol must be considered when the implementation of the policy, the exercise of the statutory power, the performance of the statutory function, or the provision of the service has been identified as a national priority; when the protocol will materially assist the national or provincial government in complying with its constitutional obligation to support local government and to build capacity in that sphere; when a protocol will materially assist the organs of state to participate in the provision of a service in a specific area to coordinate their actions in that area; and when an organ of state lacks the necessary capacity to exercise a power, perform a function or provide a service.<sup>303</sup>

Chapter 4 of the IRFA provides for the settlement of inter-governmental disputes.<sup>304</sup> These provisions are however not applicable to specific inter-governmental disputes in respect of which other national legislation provides resolution mechanisms or procedures.<sup>305</sup> Since the NEMA, in chapter 4, and other sectoral environmental acts

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<sup>302</sup> Chapter 3 of the Act provides for the conduct of inter-governmental relations in this regard.

<sup>303</sup> Section 32(2). The protocol must further identify challenges; describe roles and responsibilities of each organ of state; outline priorities, aims and desired outcomes; determine indicators to measure the effective implementation of the protocol; provide for oversight mechanisms and procedures for monitoring the effective implementation of the protocol; determine required and available resources to implement the protocol; provide for dispute settlement procedures and mechanisms; determine the duration of the protocol; and include any other matters on which the parties may agree. Any organ of state may initiate the process of concluding such a protocol, and the implementation of a protocol may be coordinated by any appropriate inter-governmental forum. See section 32.

<sup>304</sup> Chapter 4 provides in this regard for the duty to avoid inter-governmental disputes, procedures for declaring disputes as formal inter-governmental disputes, consequences of declaring formal inter-governmental disputes, the role of facilitators, assistance by the Minister or MEC for local government, and for judicial proceedings. See in this regard sections 36-42.

<sup>305</sup> Section 36.

provide for conflict resolution in terms of environmental disputes,<sup>306</sup> the IRFA provisions on conflict resolution will thus arguably not be applicable to the settlement of disputes arising between environmental authorities. Given the fragmented nature of the South African environmental governance regime and the current state of unco-operative and bureaucratic administrative behaviour and conflicts in the ranks of environmental authorities, this exclusion may arguably not further co-operation and integration reforms of the current regime.<sup>307</sup>

### ***3.5 IEM in South Africa and the NWP***

#### ***3.5.1 Contextual background***

The nature and scope of IEM has been investigated above.<sup>308</sup> It has been established that IEM does not mean 'management of the environment'. Nor is it deemed to be nature conservation or protection of natural resources. Environmental management at the governance level is deemed to mean environmental governance, which includes the collection of legislative, executive and administrative functions, processes and instruments used by all organs of state to ensure sustainable behaviour as far as activities, products, services and processes are concerned.<sup>309</sup> IEM furthermore means the integration of various aspects that relate to management of activities, products, processes and services in line with environmental principles and parameters.<sup>310</sup>

Although IEM, so defined, may contribute to integrating the fragmented environmental governance regime in South Africa and the NWP, evidence suggests that IEM is used indiscriminately in South African context to describe different things.<sup>311</sup> This may prohibit the possibility of using IEM as a strategy to address

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<sup>306</sup> See paragraphs 3.4.4 and 3.4.5 above.

<sup>307</sup> The remainder of the IRFA deals with miscellaneous issues, including reports to Parliament by the Minister with regard to the general conduct of inter-governmental relations, and the incidence and settlement of inter-governmental disputes. Section 43. Section 44 sets out provisions regarding regulations and guidelines that may be issued by the Minister in respect of the Act.

<sup>308</sup> See paragraph 2.6 above.

<sup>309</sup> See paragraph 2.6 above.

<sup>310</sup> Centre for Environmental Management *Report on an Environmental Management System for the North-West Province* 39.

<sup>311</sup> Nel and Du Plessis 2004 *SA Public Law* 181-190 argue that IEM is sometimes used to describe the alignment of environmental governance efforts, IEM as meaning the adoption and use of EIA

fragmentation. Subsequent paragraphs investigate the current use of IEM in South Africa and the NWP.

### 3.5.2 *A confusion of terminology*

The manner that the term IEM is used in South Africa, creates the impression that it describes EIA.<sup>312</sup> Glazewski<sup>313</sup> points out in this regard that terminology used world-wide to describe environmental assessment is confusing and incongruent. The matter is further complicated in South Africa, because the concept of IEM has been developed "...with its own terms and nomenclature",<sup>314</sup> resulting in gross terminological inconsistency. This confusion is evident from authoritative writings dealing with the concepts EIA and IEM. Preston, Robins and Fuggle,<sup>315</sup> for example, dedicate an entire chapter entitled 'Integrated Environmental Management' to discuss, what is essentially, EIA. Although Glazewski<sup>316</sup> seems to distinguish between EIA and IEM, the author uses the same approach as the latter authors, by also pointing out that IEM is a procedure to consider the environmental consequences of developments during the planning process. This procedure, he states, is also related to strategic environmental assessment.<sup>317</sup> The foregoing examples are an indication that IEM is relegated to only apply to the planning and design phase in the project life-cycle, whilst IEM, as has been argued above, is applicable to the whole of the project life-cycle, including the planning and design phase and the operational phase.<sup>318</sup>

South African environmental law provisions furthermore use EIA and IEM as synonymous terms. Evidence for this may be found in the objectives of IEM,

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arrangements by other organs of state, and IEM as meaning the adoption of numerous parameters in the development and decision-cycles.

<sup>312</sup> Centre for Environmental Management *Report on an Environmental Management System for the North-West Province* 39 and Nel and Du Plessis 2004 *SA Public Law* 181-182. EIA may be defined for the purpose of this study as:

...[t]he systematic identification and evaluation of the potential impacts (effects) of proposed projects, plans, programmes, or legislative actions relative to the physical-chemical, biological, cultural and socioeconomic components of the total environment.

Canter W *Environmental Impact Assessment* 2<sup>nd</sup> ed (McGraw Hill 1996) 2, quoted in Glazewski *Environmental Law* 272. See also Smith *Impact Assessment* 15-16 for other definitions of EIA.

<sup>313</sup> Glazewski *Environmental Law* 271, and Glazewski *Environmental Law in South Africa* 230-232.

<sup>314</sup> Glazewski *Environmental Law* 271, and Glazewski *Environmental Law in South Africa* 230.

<sup>315</sup> Preston, Robins and Fuggle *Integrated Environmental Management* 748-761.

<sup>316</sup> Glazewski *Environmental Law* 273, and Glazewski *Environmental Law in South Africa* 231.

<sup>317</sup> Glazewski *Environmental Law* 273, and Glazewski *Environmental Law in South Africa* 231-232.

<sup>318</sup> See paragraph 2.6 above.

enumerated in chapter 5 of the NEMA which is entitled 'Integrated Environmental Management'. Chapter 5 uses IEM in the context of the identification, prediction and evaluation of actual or potential impacts on the environment.<sup>319</sup> This clearly describes the EIA process. It is furthermore curious that the NEMA does not endeavour to define either EIA, or IEM. As far as could be established, the term 'environmental assessment' is used only once in the act, and again, in the same context as IEM.<sup>320</sup> One of the reasons for this inconsistent use of terminology may be attributed to the official *Integrated Environmental Guideline Series Department of Environmental Affairs* 1992 (hereafter the EIA Guidelines),<sup>321</sup> published in 1992, that refers to EIA as IEM.<sup>322</sup> The process described in the EIA Guidelines does in fact not refer to IEM, but rather EIA, which was provided for by sections 21, 22, 23 and 26 of the ECA, read together with GN R1182, R1183 and R1184 published in *Government Gazette* No. 18261, 5 September 1997.<sup>323</sup>

IEM is also sometimes used to mean the adoption of the NEMA principles by various line functionaries of government operating in different spheres of government.<sup>324</sup> The NEMA-based section 2 principles have been adopted by various environmental sectoral acts to form the premise upon which various line functionaries should execute environmental governance tasks.<sup>325</sup> The principles in section 2 of the NEMA are thus viewed as constituting IEM. This is in fact not the case because, although the NEMA principles underwrite IEM, the principles do not comprehensively encompass the full ambit of IEM. The mere adoption of the NEMA principles by different line functionaries, accordingly does not amount to IEM simply because the provisions of

<sup>319</sup> Sections 23(2)(b)-23(2)(e) of the NEMA.

<sup>320</sup> Section 7(3)(d) of the NEMA.

<sup>321</sup> *Integrated Environmental Guideline Series Department of Environmental Affairs* 1992: *The Integrated Environmental Management Procedure* (vol 1); *Guidelines for Scoping* (vol 2); *Guidelines for Report Requirements* (vol 3); *Guidelines for Review* (vol 4); *Checklist of Environmental Characteristics* (vol 5); *Glossary of Terms Used in Integrated Environmental Management* (vol 6).

<sup>322</sup> Nel and Du Plessis 2004 *SA Public Law* 182.

<sup>323</sup> See Kotzé and Van der Walt 2003 *South African Journal of Environmental Law and Policy* 39-50. Nel and Du Plessis 2004 *SA Public Law* 182, furthermore note that these EIA regulations use EIA differently to mean a more detailed environmental assessment study and report, when compared to a scoping report. It should also be noted that new EIA regulations in terms of chapter 5 of the NEMA, as amended by the *National Environmental Management Second Amendment Act* 2004 will come into force in the second part of 2005. These provisions will replace the EIA provisions in terms of ECA.

<sup>324</sup> Nel and Du Plessis 2004 *SA Public Law* 186.

<sup>325</sup> See, for example, section 37(2) of the MPRDA, which states that the section 2 the NEMA principles must serve as guideline for the interpretation, implementation and administration of the Act.

the NEMA have been incorporated in respective line function activities and legislation.<sup>326</sup>

Nel and Du Plessis<sup>327</sup> further point out that IEM is sometimes used incorrectly to describe the alignment of environmental governance efforts, IEM as meaning the adoption and use of EIA arrangements by other organs of state, and IEM as meaning the adoption of numerous parameters in the development and decision-cycles.

IEM is also used incongruently in the NWP.<sup>328</sup> The SoER of the NWP acknowledges IEM as being a crucial strategy for addressing environmentally related problems in the NWP.<sup>329</sup> The SoER specifically states that IEM is a code of practice to ensure the integration of environmental considerations related to the development and management of all activities in the NWP.<sup>330</sup> IEM, together with its accompanying procedures, have been practiced for a number of years in the NWP, with specific reference to mining operations throughout the NWP, smelting operations in Rustenburg, parks and resorts on nature reserves and farms, estate developments adjacent to the Hartebeespoort Dam, township developments, filling stations, power stations, telecommunication structures, the establishment of landfill sites, as well as road development which involves the national highway between Zeerust and the Hartebeespoort Dam.<sup>331</sup>

The SoER, however, reiterates the fact that mining activities, heavy industry, medium and small-scale industry, agricultural activities, township developments and service infrastructure in the formal housing areas, are not at present being regulated and

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<sup>326</sup> Nel and Du Plessis 2004 *SA Public Law* 187.

<sup>327</sup> See for a detailed discussion Nel and Du Plessis 2004 *SA Public Law* 181-190, and Centre for Environmental Management *Report on an Environmental Management System for the North-West Province* 39-40, 48-66.

<sup>328</sup> It is, for example, evident from the SoER that the term IEM is used in line with authorisations issued to proponents in terms of sections 21, 22 and 26 of the ECA, which means approval of environmental impact reports with records of decision (RODs) being issued.

<sup>329</sup> DACE *NWP State of the Environment Report*  
<http://www.environment.gov.za/soer/reports/northwest/01%20Contents.pdf>.

<sup>330</sup> DACE *NWP State of the Environment Report*  
<http://www.environment.gov.za/soer/reports/northwest/01%20Contents.pdf>.

<sup>331</sup> DACE *NWP State of the Environment Report*  
<http://www.environment.gov.za/soer/reports/northwest/01%20Contents.pdf>.

managed in a sound, effective and adequate fashion.<sup>332</sup> It is specifically stated that DACE faces a number of challenges, which include: insufficient financial and human capacity; lack of integration and co-operation between government departments involved in environmental matters; lack of integration and co-operation between the three different spheres of government; insufficient monitoring of compliance to conditions laid out in permits; fragmented and outdated provincial environmental legislation; and unsustainable use of natural resources.<sup>333</sup> Some of these problems experienced may be attributed to, *inter alia*, insufficient understanding and application of the concept of IEM in the provincial sphere.

It may be derived from the exposition above, that for IEM to be employed as a mechanism for integrating fragmented environmental governance efforts in South Africa and the NWP, a clear understanding, application and implementation of the concept are required.<sup>334</sup> It may also be argued that current understanding, application and implementation of IEM in South Africa and the NWP arguably do not further sustainable and integrated environmental governance practices, since the focus is more on EIA than on IEM.

### **3.6 IPPC in South Africa and the NWP**

#### **3.6.1 Introduction**

The scope, nature, benefits and objectives of IPPC as a mechanism to integrate fragmented environmental governance efforts, as discussed above, are also applicable to the South African and NWP scenario.<sup>335</sup> Seen in the context of integration, IPPC may be specifically relevant for the South African scenario, because waste management and pollution is currently regulated by a plethora of laws and a

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<sup>332</sup> DACE NWP State of the Environment Report  
<http://www.environment.gov.za/soer/reports/northwest/01%20Contents.pdf>.

<sup>333</sup> DACE NWP State of the Environment Report  
<http://www.environment.gov.za/soer/reports/northwest/01%20Contents.pdf>.

<sup>334</sup> See also paragraph 2.6 above for a detailed discussion on IEM.

<sup>335</sup> Paragraph 2.8 above.



fragmented administrative system.<sup>336</sup> Subsequent paragraphs investigate current initiatives aimed at implementing IPPC in South Africa.

### 3.6.2 *The White Paper on Integrated Pollution Control and Waste Management*

In 1994 the DEAT initiated a project entitled: *Integrated Pollution Control: Project Framework and Plan Describing the Strategic Process to Develop a National Holistic Policy on Integrated Pollution Control*. The principal aim of the project was to draft legislation for integrated waste management in South Africa, and was later extended to also include the establishment of accompanying integrated administrative structures.<sup>337</sup> This policy process was followed by the publication of a discussion document in 1997 which eventually led to the drafting of the *White Paper on Integrated Pollution and Waste Management for South Africa: A Policy on Pollution Prevention, Waste Minimisation, Impact Control and Remediation* (hereafter the White Paper) in 2000.<sup>338</sup> The White Paper contains important policy statements relating to integrated pollution and waste management (hereafter IPWM).<sup>339</sup> Some of the most important provisions for the purpose of this study are discussed below.

The White Paper represents a paradigm shift in terms of pollution control and waste management, especially when considering the current fragmented environmental governance regime dealing with IPWM in South Africa. A central tenet in the policy is the move from end-of-pipe technologies towards a regime that focuses on pollution prevention;<sup>340</sup> waste minimisation; cross-media integration; institutional integration,

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<sup>336</sup> Lombard, Botha and Rabie *Solid Waste* 511, Stein 1997 *South African Journal of Environmental Law and Policy* 253, 255-264, and paragraph 3.2.2.4 above.

<sup>337</sup> Stein 1997 *South African Journal of Environmental Law and Policy* 254.

<sup>338</sup> South Africa (Republic) *White Paper on Integrated Pollution and Waste Management for South Africa: A Policy on Pollution Prevention, Waste Minimisation, Impact Control and Remediation* N227/2000 in *Government Gazette* 20978 17 March 2000. The White Paper is well-founded on, and supports the *White Paper on Environmental Management Policy for South Africa* N749/1998 in *Government Gazette* 18894 15 May 1998 (hereafter the White Paper on Environmental Management Policy).

<sup>339</sup> IPWM is defined as:

...a holistic and integrated system and process of management aimed at pollution prevention and minimisation at source, managing the impact of pollution and waste on the receiving environment and remedying damaged environments.

See White Paper 10. The fact that the White Paper terms IPPC, IPWM is curious when considering the overall nature, aim and purpose of IPPC discussed elsewhere in this study. See paragraph 2.8 above and chapters 4-6 below. Reasons for this are discussed in paragraph 3.6.3 below.

<sup>340</sup> See also, White Paper 24-26, for further provisions relating to the preventive approach. It is noteworthy that the implications of a preventive approach include: assisting government in attaining its

both horizontal and vertical, of departments and spheres of government; and involvement of all sectors of society in pollution and waste management.<sup>341</sup>

The foreword to the White Paper acknowledges that these policy considerations represent government's new thinking in relation to pollution control and waste management. The White Paper furthermore recognises the unsustainable results of the current fragmented environmental governance regime.<sup>342</sup> It is specifically stated that:

Although South Africa has extensive environment, pollution and waste management legislation, responsibility for its implementation is scattered over a number of different departments and institutions. The fragmented and uncoordinated way that pollution and waste is currently being dealt with, as well as the insufficient resources to implement and monitor existing legislation contribute largely to the unacceptable high levels of pollution and waste in South Africa. This White Paper will implement co-operative governance as envisaged in the Constitution. The current fragmentation, duplication and lack of co-ordination will be eliminated. The White Paper on Integrated Pollution and Waste Management will result in a review of all existing legislation and the preparation of a single piece of legislation dealing with all waste and pollution matters.<sup>343</sup>

The White Paper proposes a number of mechanisms to implement the objectives of the policy. The primary mechanism in this regard is a legislative programme that will culminate in new pollution and waste legislation. This proposed legislation has as its objective to, *inter alia*, address current legislative gaps and clarify and allocate responsibilities within government for pollution and waste management.<sup>344</sup>

Chapter 2.1 of the White Paper discusses the international context within which the policy has been formulated. Specific reference is made to international environmental law instruments that promote sustainable development and that relate to pollution

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sustainable development goals; ensuring that the quality, quantity and accessibility of information are improved; facilitating strong partnerships between government, the private sector, labour, non-governmental organisations and communities; facilitating compliance with environmental laws and reducing the amount of bureaucratic delays; and building capacity and awareness. White Paper 26.

<sup>341</sup> White Paper 10-11.

<sup>342</sup> It is stated in this regard that a number of limitations inhibit the achievement of sustainable IPWM. These include limits of impact management; limited civil society involvement; inadequate integration of environmental media; inadequate integration across government departments; lack of capacity to implement policies; and inadequate consideration of global environmental issues. White Paper 13.

<sup>343</sup> White Paper 5. It is furthermore emphasized that, due to the crosscutting nature of pollution and waste management, the involvement of the private sector, and co-operative partnerships and relationships between organs of state themselves and between government and the public sector is of vital importance for the successful achievement of the objectives of IPPC.

<sup>344</sup> White Paper 5.

control and waste management.<sup>345</sup> No reference is however made to current trends at international level to apply the principles of IPPC in endeavours to address fragmented pollution prevention and control regimes.<sup>346</sup> In national context, chapter 2.2 of the White Paper highlights the relevance and importance of IPWM in terms of constitutional provisions, the White Paper on Environmental Management Policy for South Africa, the Reconstruction and Development Programme, the Growth, Employment and Redistribution Macroeconomic Strategy, and the NEMA as environmental framework legislation.<sup>347</sup> It is significant to note that no mention is made of the current fragmented environmental governance regime in terms of the context of the policy. This should arguably be one of the most important considerations in establishing a policy on IPWM.

Key issues to be addressed by the policy on IPWM include, *inter alia*, the effect that pollution and waste currently have on land, air and water.<sup>348</sup> Further issues include lack of priority afforded to waste management; unacceptable safety, health and environmental practices for pollution and waste management; the absence of integrated waste management options; and insufficient involvement and empowerment of people.<sup>349</sup> Although the fragmented nature of the environmental governance regime, and possible accompanying unsustainable results, are not mentioned insofar as the context of the policy is concerned, fragmented legislation and ineffective enforcement is highlighted as a concern which needs to be addressed by the policy. It is specifically stated in this regard that waste management legislation is currently fragmented, unfocused and ineffective, with a resultant lack of control in all aspects of waste management.<sup>350</sup> It is also acknowledged that lack of government capacity means that the enforcement of existing legislation is frequently unfocused, especially with regard to waste disposal.<sup>351</sup> It is apparent from these provisions that the emphasis is on waste management, rather than pollution control. Arguably, these provisions also do not acknowledge the fragmented administrative system that is responsible for implementation of fragmented legislation.

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<sup>345</sup> White Paper 15-16.

<sup>346</sup> See paragraph 2.8 above, and chapters 4-6 below.

<sup>347</sup> White Paper 16-19.

<sup>348</sup> White Paper 20-22.

<sup>349</sup> White Paper 23-24.

<sup>350</sup> White Paper 23.

<sup>351</sup> White Paper 23.

'Integration' in terms of the policy should be understood as including integration between environmental media, to address their interactions and overlapping management issues, and between DEAT and the IPWM policy and other regulatory authorities, policies, and strategies, that govern the different environmental media.<sup>352</sup> A functional approach to integration also entails integration of source-based controls, management of the receiving environment by way of EIA<sup>353</sup> and remediation measures.<sup>354</sup> Integration furthermore seems to be based on the different environmental media. In terms of water resources, it is specifically provided in this regard that issues requiring consideration include: the regulation of water pollution by DWAF; preventive and management measures by DME; the agricultural and domestic use of herbicides, pesticides and poisons, and their contribution to the contamination of storm water run-off; soil erosion resulting in siltation of reservoirs and high silt loads in rivers; atmospheric deposition on land and the indirect impact on surface and groundwater; and wind-blown dust and solids from tailing deposits and their impact on water quality.<sup>355</sup> With regard to air pollution, integration endeavours must consider regulation of air pollution by DEAT, the provinces and municipalities; pollution of water used for scrubbing air; and air pollution arising from the disposal of solid waste.<sup>356</sup> Integration endeavours relating to land pollution should take into account; regulation of land pollution by the Department of Agriculture, DWAF, DME and other pollution control authorities; the impact of land pollution on water quality; the impact of organic agricultural wastes on surface and groundwater quality; the impact of soil erosion and agricultural management practices on water quality; land pollution from liquid effluent disposal *via* irrigation; the impacts of industrial activities or infrastructure on surface and ground water quality in terms of related effects on land or soil; the impact of sewage treatment works; the impact of residential development; land application of sewage sludge; and the impacts of waste and hazardous waste disposal sites.<sup>357</sup> In terms of waste regulation, integration efforts should take into account aspects relating to the regulation of waste by DEAT.<sup>358</sup> It is

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<sup>352</sup> White Paper 26.

<sup>353</sup> It is noteworthy that confusion relating to the concept of IEM is also evident from these provisions in the White Paper. Also see paragraph 3.5 above.

<sup>354</sup> White Paper 29.

<sup>355</sup> White Paper 27.

<sup>356</sup> White Paper 27-28.

<sup>357</sup> White Paper 28.

<sup>358</sup> White Paper 29.

noteworthy that the integrated approach advocated by this policy is explicitly based on a sectoral approach, where control measures are to be executed in relation to a specific environmental medium by specific environmental departments in various spheres of government responsible for that medium. It may be argued that this approach contradicts the principal aim of integration advocated by the generally recognised IPPC approach discussed elsewhere in this study.<sup>359</sup>

Chapter 5 of the White Paper further sets out seven strategic goals and objectives of the IPWM policy. The objectives and goals are to be achieved through the National Waste Management Strategy which also includes short-term actions plans.<sup>360</sup> The first goal concerns the establishment of an effective and harmonised institutional framework and integrated legislation, and is perhaps the most important for the purpose of this study.<sup>361</sup> With regard to the institutional framework, it is stated that mechanisms must be established to give effect to the institutional arrangements expanded on in chapter 6,<sup>362</sup> and that a review and audit of skills, resources, functions, and capacities in DEAT and DWAF must be conducted in order to realign them for the effective implementation of IPWM.<sup>363</sup> It is stated in this regard that the DEAT is in the process of legislative reforms which should be completed by 2000. At the time of writing, no significant legal reforms for the achievement of this goal have been made. Other strategic goals of the IPWM policy include pollution prevention, waste minimisation, remediation and impact management;<sup>364</sup> holistic and integrated planning;<sup>365</sup> participation and partnerships in IPWM;<sup>366</sup> empowerment and education in IPWM;<sup>367</sup> information management,<sup>368</sup> and international co-operation.<sup>369</sup>

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<sup>359</sup> See paragraph 2.8 above, and chapters 4-6 below.

<sup>360</sup> White Paper 31. See also Department of Environmental Affairs and Tourism, and Department of Water Affairs and Forestry *National Waste Management Strategies and Action Plans South Africa: Action Plan Development Phase* June 1999. It should further be noted that no strategy and action plans relating to pollution control have been formulated to date.

<sup>361</sup> White Paper 32.

<sup>362</sup> See below.

<sup>363</sup> White Paper 33. Short term deliverables in this regard include, amongst others, establishment of a single, integrated and efficient administrative system to deal with environmental authorisations and EIAs; setting of national ambient quality and environmental quality standards and criteria; developing uniform procedures for setting and enforcing quality standards; and development of regulations to enforce coordinated and integrated waste management planning. See in this regard White Paper 33-34.

<sup>364</sup> White Paper 34-39.

<sup>365</sup> White Paper 39-40.

<sup>366</sup> White Paper 40.

<sup>367</sup> White Paper 40-42.

<sup>368</sup> White Paper 42.

<sup>369</sup> White Paper 43.

Chapter 6 of the White Paper is entitled 'Governance', and deals with the role of government and stakeholders, as well as mechanisms for the enforcement of IPWM. It is provided in this regard that DEAT, as the environmental lead agent, will be the responsible and competent authority with regard to IPWM.<sup>370</sup> The functions of DEAT include: establishing policy, strategies and legislation; coordination; enforcement; dissemination of information; appeals and participation; monitoring, auditing and review and capacity building.<sup>371</sup> In order to execute these functions, DEAT has the power to, *inter alia*, enforce compliance with IPWM; bind all organs of state and spheres of government to comply with and give effect to IPWM; review the environmental impact of all government policies, strategies, plans, programmes and actions insofar as they relate to IPWM; and intervene in instances where provincial and local government are not able to fulfil their obligations.<sup>372</sup> Other departments that may also be involved with IPWM include DWAF, DME, the Department of Health and the Department of Agriculture.<sup>373</sup> These departments have similar functions and powers as DEAT insofar as they are responsible for a specific environmental medium. It may be derived from these provisions that, although DEAT is designated as the overall competent authority insofar as implementation of IPWM is concerned, governance tasks and mandates for the execution of sector-related or environmental media-specific IPWM matters, including water pollution, minerals, health and agriculture, are still fragmented along various autonomous departments or line functionaries of government.<sup>374</sup> This fragmentation is also noted in terms of the provision that lead departments will retain functional integrity and accountability in executing their specific legal mandates.<sup>375</sup> Chapter 6 also provides that provincial and local government are responsible for governance of IPWM in the provincial and local spheres.<sup>376</sup> In terms of these policy provisions, it also seems that governance efforts

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<sup>370</sup> White Paper 45-46.

<sup>371</sup> White Paper 46.

<sup>372</sup> White Paper 46.

<sup>373</sup> White Paper 46-47.

<sup>374</sup> Moreover, impact management by way of ambient standards, will be the responsibility of DWAF and DEAT. See further, White Paper 49-50. Ambient environmental quality monitoring and compliance monitoring will also be media-specific and sector-based and will be dealt with by the various spheres and line functions of government involved with IPWM. See further White Paper 50-51. This supports the argument that DEAT does not function as a strong and central regulatory lead agent, but rather as a department that coordinates functions of other departments. See paragraph 3.2.3 above.

<sup>375</sup> White Paper 49.

<sup>376</sup> White Paper 47-48.

in relation to IPWM remains fragmented in terms of the various spheres of government.

According to the White Paper, the environmental authorisation process in South Africa is part of the whole governance effort provided for in chapter 6. It is specifically provided for in this regard that:

The current fragmentation, duplication and lack of coordination in the authorisation process and assessment reporting requirements will be replaced by a single streamlined and efficient administrative system. A simple process for environmental authorisations will be developed to ensure that activities with a possible detrimental effect on the environment are adequately regulated.<sup>377</sup>

The White Paper envisages that a single entry point for authorisation applications will be investigated for this purpose. At the time of writing, the relevant authorities have put no formal arrangements forward in this regard. In relation to the authorisation process, subsequent policy provisions provide for the possibility to employ a wide selection of environmental management, or regulatory instruments, including, 'command and control' tools, market-based instruments, voluntary agreements, and land use planning and controls.<sup>378</sup> It is however noted that environmental authorities still favour the use of 'command and control' tools in the form of environmental authorisations, and that no significant developments have taken place in this regard.<sup>379</sup>

Further provisions in chapter 6 that relate to governance include: capacity building in the public and private sectors to execute IPWM; establishment of information systems regarding IPWM including, amongst others, pollution emission information, registration of waste disposal sites, and accessibility of information; continual research and development activities; and the role of civil society in IPWM.<sup>380</sup>

Chapter 7 sets out the way forward for the White Paper. It specifically provides for administrative arrangements for the successful implementation of the IPWM policy;

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<sup>377</sup> White Paper 49.

<sup>378</sup> White Paper 51-54.

<sup>379</sup> Nel and Du Plessis 2001 *South African Journal of Environmental Law and Policy* 13-19.

<sup>380</sup> White Paper 54-60.

the National Waste Management Strategy; and legislative amendments and implementation of legislation.<sup>381</sup>

### 3.6.3 *A critical evaluation of the White Paper*

Apart from various points of criticism in relation to the White Paper raised above, some other issues regarding the IPWM policy are noted here.

General wording employed by the White Paper suggests that the emphasis is on waste minimisation and not so much on IPPC as discussed elsewhere in this study.<sup>382</sup> The White Paper, in this regard, seems in some instances to distinguish between waste and pollution, and in other instances not. Firstly, these terms are defined separately in the document. Pollution is defined in the White Paper as:

Any change in the environment caused by substances, radioactive or other waves, noise, odours, dust or heat emitted from any activity, including the storage or treatment of waste and substances, construction and the provision of services, whether engaged in by any person or an organ of state, where that change has an adverse effect on human health or well-being or on the composition, resilience and productivity of natural or managed ecosystems, or on materials useful for people, or will have such an effect in future.<sup>383</sup>

Waste, is defined by the White Paper as:

An undesirable or superfluous by-product, emission or residue of any process or activity which has been discarded, accumulated or been stored for the purpose of discarding or processing. It may be gaseous, liquid or solid or any combination thereof and may originate from a residential, commercial or industrial area. This definition includes industrial waste water, sewage, radioactive substances, mining, metallurgical and power generation waste.<sup>384</sup>

These definitions arguably suggest that pollution is a wider concept than waste, and that pollution, in this instance, includes waste, or that pollution may be caused by waste. Moreover, waste minimisation is arguably only a component of IPPC.<sup>385</sup> The distinction in this regard is questionable when considering the overall nature of IPPC discussed elsewhere.<sup>386</sup> The central focus of IPPC is on the integrated control of

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<sup>381</sup> See in this regard White Paper 61-62.

<sup>382</sup> See paragraph 2.8 above and chapters 4-6 below.

<sup>383</sup> White Paper 78.

<sup>384</sup> White Paper 79.

<sup>385</sup> See paragraph 2.8 above.

<sup>386</sup> See paragraph 2.8 above and chapters 4-6 below.



pollution, whereby waste regulation is included. The distinction in the White Paper arguably aims to separate waste and pollution issues for the sake of keeping intact the mandates for their regulation. This may mean that waste will in future be regulated by those authorities currently mandated to regulate waste, and pollution by those authorities currently regulating pollution. It is noted here that whilst waste management is principally the task of DWAF, pollution control and regulation mainly resorts under the mandate of DEAT. This, it is argued, is contrary to the primary integration theory proposed by IPPC, and may accordingly not contribute to further IPPC in South Africa and the NWP. It is also questioned in this regard why the policy is in fact entitled IPWM, rather than the universally accepted concept of IPPC. By having employed the concept of IPPC from the outset, it may arguably have contributed to terminological consistency and legal certainty in the policy.

No uniformly applicable pollution standard has furthermore been set by the IPWM policy.<sup>387</sup> This is questionable when considering that a uniform applicable pollution standard is crucial to the IPPC effort.<sup>388</sup> Moreover, perhaps the most significant shortcoming of the IPWM policy, is the fact that it has to date not been codified by environmental legislation.<sup>389</sup>

It may be derived from the foregoing that the DEAT and other stakeholders involved with the establishment of IPPC in South Africa have to a disappointing extent failed to entrench the concept of IPPC in South African environmental law. The envisaged legislation and administrative structures for IPPC have at the time of writing not been drafted and established. Moreover, the plethora of legislation and fragmented regulatory structures that deal with waste management and pollution control, are still

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<sup>387</sup> Glazewski *Environmental Law* 654, and Glazewski *Environmental Law in South Africa* 551-555. Various standards have been established under a number of environmental acts. These standards are however not uniform and tend to be environmental medium specific. The NEMA refers to the concept of Best Practicable Environmental Option and the polluter pays principle, preventive principle, and precautionary principle, albeit in the context of IEM. See sections 2(4)(a)(ii), 2(4)(a)(vii), 2(4)(p) and 2(4)(b) of the NEMA. The APPA adopts 'best practicable means' in section 1 thereof. The NWA provides in section 26 for waste standards in general terms. See for a comprehensive discussion Glazewski *Environmental Law* 658-660. Seen in the context of the importance of a uniform scientific pollution standard as an integral part of IPPC, the omission of a uniformly applicable pollution standard is an unfortunate omission. See also paragraph 2.8 above and chapters 4-6 below.

<sup>388</sup> See paragraph 2.8 above and chapters 4-6 below.

<sup>389</sup> No mention is made of IPPC in the NEMA as far as could be established. Nor has any legislation been established that deals exclusively with IPPC.

to a large extent in existence. Stein<sup>390</sup> rightly notes in this regard that "...it is doubtful whether any minimisation of the legislation and regulatory control measures pertaining to waste [and pollution] has taken place to date".<sup>391</sup>

There may be a number of reasons for this state of affairs. One of the possible reasons may be the 'undesirable' political effects of drafting a single act dealing with IPPC. Such an act may entail comprehensive administrative restructuring which may lead to an encroachment on existing mandates. A further obvious effect may also be the necessity to amend the 1996 Constitution with regard to the functional areas of the different spheres of government enumerated in schedules 4 and 5.<sup>392</sup> Although this study recognises the fact that the implementation of IPPC will, to say the least, be a challenging endeavour for environmental authorities in South Africa, it is argued that the obvious benefits posed by IPPC necessitate the implementation thereof as soon as possible in South African environmental law.

### ***3.7 Summary and conclusions***

#### ***3.7.1 Fragmentation of governance efforts in South Africa and the NWP***

##### ***3.7.1.1 Nature and extent of fragmentation***

The environmental governance regime in South Africa and the NWP is fragmented in various ways. Fragmentation in a vertical and horizontal sense describes fragmentation between the different spheres of government, and between the various line functionaries in each sphere respectively. The environmental law framework is also fragmented, since various acts regulate specific environmental sectors or environmental media. This is evident from Appendix 1 which demonstrates that agriculture, water resources, air quality, biodiversity resources, minerals and energy, heritage resources, marine resources, EIAs, land use and planning, and pollution control, are currently regulated by a fragmented matrix framework of legislation.

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<sup>390</sup> Stein 1997 *South African Journal of Environmental Law and Policy* 255.

<sup>391</sup> The author illustrates this by pointing out the various different line functionaries responsible for waste management and pollution control in terms of various legislative arrangements. See in this regard Stein 1997 *South African Journal of Environmental Law and Policy* 264-265.

<sup>392</sup> Paragraph 3.4.3 above.

Environmental legislation is thus silo-based and sector-specific and prescribes various procedures, and processes that are the responsibility of different environmental authorities. This causes confusion, duplication, overlap of administrative mandates, and confusion with regard to jurisdictions. The land use and planning regime is also fragmented with various laws and authorities involved in the regulation of this sector. Fragmentation is furthermore evident in the legislative framework pertaining to pollution control, since legislation in this regard focuses on specific environmental media which is the responsibility of separate and autonomous spheres of government and organs of state. South Africa, to date, also has no single act, nor any centralised organ of state, that regulates pollution of the various environmental media in an integrated fashion. It is also evident that fragmentation at national level, is replicated in the NWP.

#### 3.7.1.2 Reasons for fragmentation

There are various reasons for the existence of fragmentation. Fragmentation may be attributed to historical developments of the South African environmental law framework which did not focus on sustainable results, but rather on resource exploitation and social engineering. DEAT, as the environmental lead agent, is not endowed with sufficient centralised regulatory competence, and only acts as a coordinator of some environmental governance matters. Legislation is fragmented which creates an overlap of competencies and jurisdictions. The very nature of environmental management, which is an all-encompassing term, may further inhibit integrated environmental governance efforts. The provisions of the 1996 Constitution exacerbate fragmentation because of the delineation of nine provinces and allocation of environmental governance mandates to specific spheres and line functionaries of government. The historical development of the land use and planning law regime is also evidence of the fact that this regime was focused on social engineering, rather than creating an integrated legal framework to address land use and planning concerns in a sustainable way.

### *3.7.2 Organisational behaviour in South Africa and the NWP*

Current unco-operative organisational behaviour patterns in the environmental administration in the national and provincial spheres exacerbate fragmented environmental governance efforts. The environmental administration in South Africa and the NWP is plagued by a number of challenges including, amongst others: lack of human and financial resources; unco-operative governance practices; insufficient availability of information to authorisation applicants and environmental authorities; lack of inter-governmental communication and insufficient communication with the private sector; complicated and costly environmental authorisation processes; lack of political support and buy-in; time delays in administrative processes; roles and responsibilities of authorities that are not clearly defined; and overlap of functions and interests between traditional authorities and local municipalities. These challenges arguably lead to unsustainable service-delivery efforts by environmental authorities.

Apart from the various general reasons for the existence of unco-operative and unsustainable organisational behaviour patterns by government officials, various other specific factors exist in the South African environmental governance sphere which may lead to this type of behaviour. These include: the fact that the governance system and state administration, including the environmental administration, is in a continual process of reform and transformation. The fragmented environmental governance regime itself may also lead to problems experienced in the ranks of environmental authorities.

### *3.7.3 CEG*

Co-operative governance is a concept that is firmly entrenched in South African law. It is a concept which represents a paradigm shift in governance efforts in South Africa. The emphasis of co-operative governance is on co-operation, consultation, support and collaboration among and between the independent, yet, inter-related spheres and line functions of government. Co-operative governance is also relevant for environmental governance efforts, and is referred to as CEG for the purpose of this study. Whilst the 1996 Constitution provides for the constitutional imperative to facilitate co-operative governance, the NEMA as framework legislation, provides for

various principles, mechanisms and structures to apply co-operative governance in environmental context. The provisions of the NEMA that relate to CEG, may contribute to facilitate CEG and furthermore provide practical solutions to address unco-operative administrative behavioural patterns and fragmentation of the environmental governance regime in South Africa and the NWP.

CEG is also provided for by various sectoral acts that relate directly or indirectly to the environment. This may be regarded as a positive development since the constitutional and environmental framework law provisions on CEG are supported by correlating sector-specific provisions on CEG. This may lead to a sustainable collaborative effort to establish CEG across all spheres and line functions of government in order to address the current fragmented environmental governance regime in South Africa and the NWP.

The IRFA is arguably one of the most important recent developments in the context of co-operative governance. Although the Act contains a number of shortcomings insofar as CEG is concerned, important principles, mechanisms and procedures are established which may ultimately support the new form of governance in South Africa that should be based on co-operation, coordination and consultation.

#### *3.7.4 IEM*

IEM is a concept that may be used to address fragmentation in South Africa and the NWP. This concept is however misunderstood and consequently incorrectly applied in environmental governance efforts. The principal concern in this regard is that IEM is confused with EIA. IEM is also used to describe the adoption of the NEMA principles by various line functionaries of government operating in different spheres of government; to describe the alignment of environmental governance efforts; IEM as meaning the adoption and use of EIA arrangements by other organs of state; and IEM as meaning the adoption of numerous parameters in the development and decision-cycles. This confusion may render the concept worthless as a strategy to integrate fragmented environmental governance efforts in South Africa and the NWP.

It is argued that IEM should rather be attributed the meaning afforded to the concept elsewhere in this study.<sup>393</sup> IEM at the governance level is deemed to mean environmental governance, which includes the collection of legislative, executive and administrative functions, processes and instruments used by all organs of state to ensure sustainable behaviour as far as activities, products, services and processes are concerned. IEM furthermore means the integration of various aspects that relate to management of activities, products, processes and services in line with environmental principles and parameters.<sup>394</sup> Thus interpreted, it is argued that IEM may contribute significantly to guide fragmented environmental governance efforts on a sustainable path.

### 3.7.5 IPPC

IPPC may be a useful strategy to address fragmented environmental governance efforts in South Africa and the NWP. There have been some efforts to entrench the IPPC concept in South African law by way of the White Paper on IPWM. Some important policy principles, provisions, mechanisms and procedures are established which are aimed at integrating the current diffuse regime. These include the necessity to establish CEG, the need to align administrative procedures, the need to integrate the fragmented legislative regime by establishing a single act that relate to pollution control and waste management; and the creation of a one-stop environmental authorisation shop.

A number of shortcomings are however noted in this policy. The most significant being the fact that the White Paper does not seem to address the fragmented South African pollution control and prevention regime in the spirit of the generally accepted nature, aims and mechanisms proposed by IPPC. It is also noteworthy that, to date, the ambitious policy provisions have not been codified into environmental law. This may arguably not be conducive for integration efforts relating to the fragmented environmental governance regime.

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<sup>393</sup> See paragraph 2.6 above.

<sup>394</sup> See paragraph 2.6 above.

## **4. THE EUROPEAN UNION IPPC DIRECTIVE**

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## Chapter 4: The European Union IPPC Directive<sup>1</sup>

### 4.1 Introduction

Fragmentation of environmental governance efforts is a concern, not only in South Africa and the NWP, but also in the EU. In 1996, the EU passed the IPPC Directive in an effort to address existing fragmented regulatory regimes dealing with pollution prevention and control. The Directive is considered to be framework legislation in terms of which Member States of the EU must establish domestic legislation to implement the provisions of the Directive. The Directive addresses, amongst others, the fragmented and sectoral approach that emanate from separate authorisations administered by separate administrative organs; different procedures for different authorisations; varying standards of control for each authorisation; and different procedures for obtaining authorisations. The IPPC Directive aims to address these concerns, by proposing a more integrated approach to pollution prevention and control.<sup>2</sup> In terms of the IPPC Directive, an integrated approach may be achieved by way of, *inter alia*, a one-stop authorisation shop, integrated or fully coordinated administrative structures, regional integration in terms of regulatory efforts that should deal with pollution, and a holistic and integrated approach to the environment and pollution.<sup>3</sup>

Fragmentation in the South African and NWP environmental governance sphere is not only confined to pollution caused by activities from industrial operations and regulatory efforts associated therewith. The scope of fragmentation, as has been indicated above, is more far-reaching.<sup>4</sup> Although the IPPC Directive focuses primarily on pollution caused by industrial installations, the integrated approach suggested by it, may be relevant as a broad framework within which to establish a more integrated approach to environmental governance and management in its widest

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<sup>1</sup> My sincere thanks to Professor Jonathan Verschuuren, Centre for Legislative Studies, Tilburg University, The Netherlands, for his helpful comments on an earlier draft of this chapter. The views expressed herein and any errors are my own.

<sup>2</sup> It should be noted from the outset that the legal basis for the IPPC Directive is to be found in article 130 S and 130 T of the *Treaty Establishing the European Community* OJ C 325, 24.12.2002 (hereafter the EC Treaty). See further Larmuseau *De IPPC Richtlijn* 11.

<sup>3</sup> Chapters 5 and 6 focus on the implementation of the IPPC Directive in certain Member States, namely Finland and the Netherlands.

<sup>4</sup> See paragraph 3.2 above.

sense at domestic level. This chapter investigates those provisions of the IPPC Directive that may suggest comparative solutions for the problem of regulatory fragmentation in South Africa and the NWP.

The following questions regarding the IPPC Directive are addressed in this chapter:

1. What does the contextual background and historical development of the IPPC Directive entail?
2. What is the rationale behind the establishment IPPC Directive?
3. What does 'integration' entail in terms of the IPPC Directive?
4. What is the scope of application of the IPPC Directive?
5. What are the basic obligations of the operator?
6. What are the requirements with regard to the IPPC Directive authorisation?
7. What are the requirements pertaining to pollution standards?
8. What are the requirements pertaining to changes to installations?
9. What are the requirements pertaining to reconsideration, updating of, and compliance with authorisation conditions?
10. What do provisions on access to, and provision of information entail?
11. What do future developments with regard to the IPPC Directive entail?

## 4.2 Background and historical development of the IPPC Directive

### 4.2.1 Background

Jongma<sup>5</sup> states that the environmental law regimes of the EU Member States are increasingly Europeanised. The IPPC Directive is significant in this regard.<sup>6</sup> In 1996, the EU passed the IPPC Directive in an effort to address existing fragmented regulatory regimes dealing with pollution prevention and control.<sup>7</sup> In EU context, the IPPC Directive is considered an important "...ingredient of a broader, multi-part philosophy of integrated environmental policy".<sup>8</sup> This is in line with the integrated approach of the *Fifth Environmental Action Programme* (hereafter the FEAP),<sup>9</sup> because it provides for integrated pollution prevention and control of industrial emissions pertaining to air, land and water.<sup>10</sup> When compared to the existing EU environmental framework, the Directive furthermore provides a broader and more integrated approach and framework of environmental legislation to deal with environmental problems, especially those caused by industrial activities.<sup>11</sup> It is accordingly a first attempt at EU level to integrate some of the sectoral environmental

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<sup>5</sup> Jongma *De Milieuvergunning* 35.

<sup>6</sup> Chalmers 1996 *Yearbook of European Law* 571, states that the IPPC Directive may very well be the centre-piece of EC environmental policy well into the next millennium. For a concise and informative summary of the content of the IPPC Directive, see Emmott *IPPC Directive and its Development* 28-41.

<sup>7</sup> Kiss and Shelton *European Environmental Law* 517. See also for a comprehensive discussion, Larmuseau *De IPPC Richtlijn* 3-52.

<sup>8</sup> Emmott *IPPC Directive and its Developments* 23, Gilhuis 1999 *Milieu en Recht* 283, and Krämer *EC Environmental Law* 320.

<sup>9</sup> *European Union Fifth Environmental Action Programme: Towards Sustainability, A European Community Programme of Policy and Action in Relation to the Environment and Sustainable Development*, OJ 17.5.93 C 166/1. See in this regard Faure and Lefevre 1996 *European Environmental Law Review* 112.

<sup>10</sup> Jongma *De Milieuvergunning* 38, Krämer *Environmental Law in the European Union* 492 and Hughes *Environmental Law* 517.

<sup>11</sup> Farthing, Marshall and Kellett *Pollution Prevention and Control* 1, 7; Hughes *Environmental Law* 517 and Jans *Relationship between the IPPC Directive and other EC Environmental Law* 44. Faure and Lefevre 1996 *European Environmental Law Review* 112 state that when considering the EU's history of fragmented legislation, this development towards integration is an improvement. The *Water Framework Directive* 2000/60/EC OJ L 327, 22.12.2000, and the *Framework Directive on Waste* 75/442/EEC OJ L 194, 25.07.1975 also form part of the foundation of a more integrated approach to regulating pollution in Europe. Due to the scope of this study only the provisions of the IPPC Directive are investigated. It should further be noted in this regard that the IPPC Directive is intended to ultimately replace the *EU Directive on Pollution Caused by Certain Dangerous Substances Discharged into the Aquatic Environment of the Community* (76/464/ECC) OJ No L 129, 18.5.1976, p 23; and the *EU Directive on the Combating of Air Pollution from Industrial Plants* (84/360/EEC) OJ L 188, 16.7.1984 p 20. See further in this regard, Pallemarts 1996 *European Environmental Law Review* 175, and Long and Mereu 1999 *European Environmental Law Review* 180.

legislation into a single decision-making procedure.<sup>12</sup> It is also an attempt to address the fragmented and sectoral approach that emanates from, *inter alia*, separate authorisations administered by separate administrative organs; different procedures for different authorisations; varying standards of control for each authorisation; different procedures for obtaining authorisations; and dissimilar powers and competencies for enforcing authorisation conditions.<sup>13</sup>

The IPPC Directive is essentially a 'command and control' authorisation system of pollution regulation,<sup>14</sup> that aims to, *inter alia*, harmonise authorisation procedures and authorisation conditions in the EU.<sup>15</sup> This is principally done by way of a new system of environmental standard setting that is based on an integrated environmental authorisation.<sup>16</sup> The Directive thus provides a broad framework for an integrated approach to specifically IPPC, and generally, environmental governance efforts relating to pollution control.<sup>17</sup> The Directive also requires industry and regulators to consider emissions and their impacts during the design phase and not only as end-of-

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<sup>12</sup> Faure and Lefevre 1996 *European Environmental Law Review* 112, and Jans *Relationship between IPPC Directive and Other EC Environmental Law* 43. Although the IPPC Directive has contributed significantly to harmonize and simplify the current regulatory framework, it is noted that more work needs to be done in terms of codifying, recasting and simplifying the current *acquis communautaire*. See Farthing, Marshall and Kellett *Pollution Prevention and Control* 43-45.

<sup>13</sup> Kimber *Environmental Licensing and Permits* 110. Although Kimber's discussion focuses specifically on the fragmented approach of pollution regulation in the UK, it is argued that the various points raised, are equally true for, and applicable to, environmental governance regimes pertaining to pollution prevention and control in the rest of Europe. See also O'Malley 1999 *Sensors and Actuators* 79, and Faure and Lefevre *Integrated Pollution Prevention and Control: An Economic Appraisal* 108 in this regard.

<sup>14</sup> Wolf and Stanley *Environmental Law* 290, Bohne and Dietze 2004 *European Environmental Law Review* 198, Jans *Relationship between the IPPC Directive and other EC Environmental Law* 45, and Backes *Introduction* 5.

<sup>15</sup> Jongma *De Milieuvergunning* 36, Pallemarts 1996 *European Environmental Law Review* 175, and Van de Gronden 1995 *Milieu en Recht* 246. In terms of the Member States of the EU, this study only focuses on the implementation of the IPPC Directive in Finland and the Netherlands. See chapters 5 and 6 below. For an introductory exposition on the implementation of the Directive in the UK, see Farthing, Marshall and Kellett *Pollution Prevention and Control* 13-17, Hughes *et al Environmental Law* 495-542 and Macrory *Integrated Prevention and Pollution Control: the UK Experience* 64. For introductory remarks on the IPPC Directive in terms of German law, see Winter *The IPPC Directive: a German Point of View* 65-79.

<sup>16</sup> Faure and Lefevre 1996 *European Environmental Law Review* 112, and Bohne and Dietze 2004 *European Environmental Law Review* 199.

<sup>17</sup> See paragraph 2.8 above for a comprehensive discussion on IPPC. Farthing, Marshall and Kellett *Pollution Prevention and Control* 7, note that the IPPC Directive goes beyond IPPC by setting common rules for authorisation of industrial installations; by establishing activities and categories of industry that need to obtain an authorisation; and by requiring that authorisations should take into account not only emissions to air, water and land, but also generation and recovery of waste, the use of raw materials, energy efficiency, noise, prevention of accidents, and site remediation on closure. See also Hughes *et al Environmental Law* 496 and paragraph 2.8 above for a more in-depth discussion.

pipe solutions applied afterwards.<sup>18</sup> The Directive is furthermore designed to prevent, reduce, and eliminate pollution at source; to secure the prudent use of natural resources; and in so doing, to promote the achievement of sustainability.<sup>19</sup> The IPPC Directive thus proposes a more integrated approach for pollution prevention and control which should be achieved by way of, *inter alia*, a one-stop authorisation shop, integrated or fully coordinated administrative structures, regional integration in terms of regulatory efforts that should deal with pollution, and a holistic and integrated approach to the environment and pollution.<sup>20</sup>

#### 4.2.2 *Historical development*

The final adoption of the IPPC Directive on 24 September 1996 took a little over three years from the time it was first proposed by the European Commission (hereafter the EC).<sup>21</sup> When compared to the lengthy process usually undertaken to formalise EU environmental directives, this period is brief, especially when one considers the significant impacts of the integrated approach proposed by it.<sup>22</sup> Preparatory work and discussions on the IPPC Directive had, however already commenced seven years prior to formal drafting endeavours were undertaken.<sup>23</sup> The various concepts, theories, ideas, and motivations for an integrated approach to the regulation of industrial pollution activities, have been an even longer evolving process.<sup>24</sup> Noteworthy however, is that central themes throughout this discussion process centred around the ideas of a one-stop shop for environmental regulation; equal treatment of environmental media in terms of similar standards and criteria; and

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<sup>18</sup> Hughes *et al Environmental Law* 517, Chalmers 1996 *Yearbook of European Law* 573, Long and Mereu 1999 *European Environmental Law Review* 180, O'Malley 1999 *Sensors and Actuators* 78, and Emmott *IPPC Directive and its Development* 24.

<sup>19</sup> Hughes *et al Environmental Law* 517, Long and Mereu 1999 *European Environmental Law Review* 180, and O'Malley 1999 *Sensors and Actuators* 78.

<sup>20</sup> Van de Gronden 1995 *Milieu en Recht* 246. See also paragraph 4.4 below.

<sup>21</sup> Although the IPPC Directive was formally adopted on 24 September 1996, it only came into operation on 30 October 1996. See Lange 2002 *European Law Journal* 253, and Chalmers 1996 *Yearbook of European Law* 574. Also see Larmuseau *De IPPC Richtlijn* 3-7, for a comprehensive discussion on the historical development of the IPPC Directive.

<sup>22</sup> Emmott *IPPC Directive and its Developments* 23, and paragraph 4.4 below.

<sup>23</sup> Emmott *IPPC Directive and its Developments* 23.

<sup>24</sup> Emmott *IPPC Directive and its Developments* 23.

harmonisation and integration of environmental legislation and policy principles that have been developed piecemeal and *ad hoc* over a period of time.<sup>25</sup>

During the period 1985-1986, the Organisation for Economic Co-operation and Development (hereafter the OECD) Chemicals Working Group undertook a project which examined, *inter alia*, cross-media pollutants, source and region-based pollutants, as well as best practices and experiences in several countries that relate to these issues.<sup>26</sup> The project was entitled the *Integrated Pollution Control Project*.<sup>27</sup> Following this, the idea of an integrated authorisation directive was first proposed in 1988 during a symposium held in Brussels, where the results of the project were presented. The Institute for European Environmental Policy (hereafter the IEEP) was commissioned during the same period to further investigate the possibility for the establishment of an instrument to regulate integrated authorisations at EU level.<sup>28</sup> A subsequent report by the IEEP highlighted the need for a directive which should establish an integrated system of authorisations for industrial installations in the EU.<sup>29</sup> Further development at EU level in this regard were however halted in part, due to priority being given to the establishment of what would later become, the EU *Regulation on Eco-management and Auditing*.<sup>30</sup>

In the meantime, an OECD Council Recommendation on IPPC (hereafter the IPPC Recommendation)<sup>31</sup> was adopted in 1991, which advised OECD countries to:

...practice integrated pollution prevention and control, [by] taking into account the effects of activities and substances on the environment as a whole and the whole commercial and

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<sup>25</sup> Weale *et al Environmental Governance in Europe* 65, and Chalmers 1996 *Yearbook of European Law* 573.

<sup>26</sup> Chalmers 1996 *Yearbook of European Law* 574.

<sup>27</sup> Emmott *IPPC Directive and its Developments* 26.

<sup>28</sup> Emmott *IPPC Directive and its Developments* 26.

<sup>29</sup> The conclusions of the report were based on the premise that several EU Member States were already moving towards an integrated authorisation approach. It furthermore stated that, based on the *Fourth Environmental Action Programme* of the EU (EEC *Fourth Environmental Action Programme* OJ C 328, 7 December 1987), which acknowledges in principle that a single-medium approach is not necessarily the most effective approach, it may be desirable to amend EU environmental policy to allow for a uniform integrated approach. See in this regard Emmott *IPPC Directive and its Developments* 26-27.

<sup>30</sup> *Regulation on a Community Eco-management and Audit Scheme* OJ L 168, 10 July 1993.

<sup>31</sup> *Recommendation of the Council on Integrated Pollution Prevention and Control* C(90) 164 (Final), 31 January 1991.

environmental life cycles of substances when assessing the risks they pose and when developing and implementing controls to limit their release.<sup>32</sup>

An appendix to the IPPC Recommendation sets out guidelines pertaining to the achievement of integration by way of environmental-specific and environmental-related legislation,<sup>33</sup> as well as through various environmental management instruments, which include single or integrated authorisations for pollution sources.<sup>34</sup>

It was however developments in the UK that laid a firm base for the future development of the IPPC Directive.<sup>35</sup> Macrory<sup>36</sup> states in this regard that:

EC environmental policy-making is often as much a bottom-up approach as its is a top-down one in that initiatives developed in one Member State may gradually work its way upwards to form the nucleus of Community legislation.

Important developments in the UK ran parallel to the aforementioned OECD initiatives.<sup>37</sup> The British experience contributed significantly to the eventual establishment of both the IPPC Directive and the concept of IPPC,<sup>38</sup> by introducing a framework for the integration of authorisations for some industrial processes in certain sectors of industry.<sup>39</sup> This framework was established by the British *Environment Protection Act*, 1990.<sup>40</sup> Although an integrated approach to authorisations was accepted in principle by EU Member States, developments in the UK, as well as initiatives by the OECD Council Recommendation, arguably led to the revitalisation of EU endeavours to adopt a directive on IPPC. Preparations of what would ultimately become the IPPC Directive accordingly started in 1991 and resulted in the adoption of a comprehensive directive five years later.

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<sup>32</sup> Article 1(a) of the IPPC Recommendation.

<sup>33</sup> IPPC Recommendation, Appendix paragraph 4.

<sup>34</sup> IPPC Recommendation, Appendix paragraph 6.

<sup>35</sup> Weale *et al Environmental Governance in Europe* 64-65, and Hughes *et al Environmental Law* 495-542.

<sup>36</sup> Macrory *Integrated Pollution and Prevention Control: the UK Experience* 53.

<sup>37</sup> Emmott *IPPC Directive and its Developments* 28.

<sup>38</sup> Macrory *Integrated Pollution and Prevention Control: the UK Experience* 53, and paragraph 2.8 above.

<sup>39</sup> Emmott *IPPC Directive and its Developments* 28.

<sup>40</sup> Farthing, Marshall and Kellett *Pollution Prevention and Control* 1-4.

### 4.3 *The rationale behind the IPPC Directive*

The rationale behind the IPPC Directive may be derived from, amongst others, the preamble to the Directive. It is stated that the Directive recognises article 130r of the EC Treaty,<sup>41</sup> that has as one of its main objectives to prevent, reduce, and as far as possible, eliminate pollution.<sup>42</sup> Prevention and reduction of pollution should, according to article 2 of the preamble, be based on the integrated approach advocated by the FEAP that affords priority to integrated pollution control as an important part of the move towards a more sustainable balance between human activity and socio-economic development, on the one hand, and the resources and regenerative capacity of nature, on the other.<sup>43</sup>

It may be derived from the foregoing that an integral part of the IPPC Directive is the achievement of sustainable results through an integrated approach to pollution prevention and control.<sup>44</sup> The achievement and promotion of sustainability by way of an integrated approach, is reiterated in article 9 of the preamble that states that the IPPC Directive sets out a framework for IPPC by laying down measures necessary to implement this integrated approach. The result should be to achieve a high level of protection for the environment as a whole, and hence, promote sustainability. This integrated approach requires that pollution prevention and control be facilitated by viewing environmental media in an integrated fashion, since different approaches and fragmented measures to control emissions into the air, water or soil separately, may encourage the shifting of pollution between various environmental media, rather than protecting the environment as a whole.<sup>45</sup> It is also stated, in this regard, that full coordination, as a means of achieving integration of the authorisation procedure and conditions between competent authorities, may make it possible to achieve the highest practicable level of environmental protection.<sup>46</sup>

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<sup>41</sup> See also paragraph 4.1 above.

<sup>42</sup> Article 1 of the preamble of the IPPC Directive, and Long and Mereu 1999 *European Environmental Law Review* 180.

<sup>43</sup> Article 2 of the preamble of the IPPC Directive, and paragraphs 4.1-4.2 above.

<sup>44</sup> See paragraphs 2.2 and 2.8 above for a discussion of the concept of sustainability and an integrated approach to pollution prevention and control.

<sup>45</sup> Article 7 of the preamble of the IPPC Directive, and paragraph 2.8 above.

<sup>46</sup> Article 14 of the preamble of the IPPC Directive, and paragraph 2.8 above and 4.4 below.



#### 4.4 *The meaning of integration*

The concept of 'integration' is not defined in the IPPC Directive. Attributing a clear understanding to the concept is not made any easier due to lack of a generally accepted understanding of 'integration' emerging from legal and political debates.<sup>47</sup> In light of the foregoing, it is specifically questioned whether the IPPC Directive establishes a fully integrated authorisation system or merely a coordinated system of environmental authorisations. Different views are held on whether the Directive prescribes a single authorisation, whether it allows for the coordinated issuance of several authorisations for one installation, or whether it requires an integrated super-agency, or one-stop shop.<sup>48</sup> A mere literal interpretation of 'integration' furthermore suggests that there are significant differences between 'coordination' and 'integration'. Macrory<sup>49</sup> argues that the concept of integration may imply distinctly different manifestations when viewed in the context of IPPC. On the one hand it may relate to improved coordination on an administrative level, which principally pertains to regulatory bodies concerned with authorisations.<sup>50</sup> On the other hand it may imply strengthening of linkages and relationships between pollution control measures and other related systems of control, such as EIA and land use planning instruments.<sup>51</sup> Integration may even entail a more comprehensive comparison and connection, or linkage, of the various pollution impacts on different environmental media.<sup>52</sup> Moreover, integration may also refer to greater co-operation and integration of pollution control measures at regional level in the EU itself.

It is argued in this study that the IPPC Directive aims to give effect to an integrated approach to pollution prevention and control in terms of procedural integration, organisational integration, substantive integration,<sup>53</sup> and regional integration.<sup>54</sup> These various forms of integration are discussed hereafter.

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<sup>47</sup> Böhne and Dietze 2004 *European Environmental Law Review* 199.

<sup>48</sup> Backes *Introduction* 4 and Winter *The IPPC Directive: A German Point of View* 73.

<sup>49</sup> Macrory *Integrated Pollution and Prevention Control: the UK Experience* 53-54.

<sup>50</sup> Macrory *Integrated Pollution and Prevention Control: the UK Experience* 54.

<sup>51</sup> Macrory *Integrated Pollution and Prevention Control: the UK Experience* 54.

<sup>52</sup> Macrory *Integrated Pollution and Prevention Control: the UK Experience* 54.

<sup>53</sup> Böhne and Dietze 2004 *European Environmental Law Review* 199, and Faure and Lefevre 1996 *European Environmental Law Review* 113.

<sup>54</sup> Peters *Environmental Framework Directives* 16-17, 19.

#### 4.4.1 Procedural integration

Procedural integration refers to the characteristics of the authorisation procedure. It accordingly reflects on all the procedures associated with authorisations.<sup>55</sup> Industrial authorisations usually require various authorisations and subsequent authorisation procedures which are regulated by various administrative organs responsible for different environmental media.<sup>56</sup> Total integration only exists if there is one authorisation and one authorisation procedure administered by a single administrative organ.<sup>57</sup> This arguably represents some of the characteristics of holistic governance, and more particularly, a one-stop environmental authorisation shop.<sup>58</sup> In the case of several environmental media- or sector-related authorisation procedures, integration may also be established by fully coordinating authorisation procedures.<sup>59</sup> With regard to the procedural integration, the IPPC Directive furthermore specifies certain information requirements that an authorisation application must contain, and it sets out a co-operation and coordination procedure for decision-making, as well as post-decision follow-up.<sup>60</sup> Procedural integration also relates to public participation in the sense that decision-making procedures are inter-related, and influenced by the interests of society and the authorisation applicant.<sup>61</sup>

This manifestation of integration raises the question whether the IPPC Directive provides for a single integrated authorisation, or rather a coordinated administrative

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<sup>55</sup> See paragraph 4.7 below for a comprehensive discussion on the requirements associated with authorisations under the IPPC Directive.

<sup>56</sup> Bohne and Dietze 2004 *European Environmental Law Review* 200.

<sup>57</sup> Bohne and Dietze 2004 *European Environmental Law Review* 200.

<sup>58</sup> See also paragraphs 2.5 and 2.8 above.

<sup>59</sup> Bohne and Dietze 2004 *European Environmental Law Review* 200, and article 7 of the IPPC Directive.

<sup>60</sup> Article 7 of the IPPC Directive, and paragraphs 4.7-4.11 below.

<sup>61</sup> Article 15 of the IPPC Directive specifically provides in this regard that Member States shall take the necessary measures to ensure that applications for permits for new installations or for substantial changes are made available for an appropriate period of time to the public, to enable it to comment on them before the competent authority reaches its decision. Any decision, including at least a copy of the authorisation, and any subsequent updates, must be made available to the public. The results of monitoring of releases as required under the permit conditions referred to in Article 9 and held by the competent authority, must be made available to the public. An inventory of the principal emissions and sources responsible must furthermore be published every three years by the EC on the basis of the data supplied by the Member States. This article has been amended in 2003 because of the *Aarhus Convention on Access to Information, Public Participation in Decision-making and Access to Justice in Environmental Matters*, 1998 (Aarhus Convention), which provides for access to justice and protection of private sector parties that are subject to administrative decision-making. See further paragraph 4.11 below, and Kiss and Shelton *International Law* 678-681.

arrangement to achieve integration. Article 4 of the IPPC Directive requires that all installations, which fall within the Directive's scope of application, be operated with an authorisation. 'Authorisation' is defined by article 2 as:

...that part or the whole of a written decision (or several such decisions) granting authorisation to operate all or part of an installation, subject to certain conditions which guarantee that the installation complies with the requirements of this Directive. A permit may cover one or more installations or parts of installations on the same site operated by the same operator.<sup>62</sup>

The article does not provide for a single authorisation for each individual installation.<sup>63</sup> In a broader context, IPPC describes a holistic approach to address environmental pollution.<sup>64</sup> This entails that pollution should be addressed by taking into account all environmental media in an integrated manner, and by applying controls to polluting sources, substances and areas subjected to pollution.<sup>65</sup> The emphasis of IPPC is clearly on holistic, integrated control and regulation of industrial activities, based on an approach which addresses land, air and water pollution in an assimilate and coherent fashion. The aforementioned approach does not necessarily require a single authorisation *per se* in order to achieve its objectives. It rather sets out the broader framework within which IPPC should be implemented. This accords with the requirements of article 2, which leaves the eventual achievement of IPPC to the discretion of Member States who are only required to take the necessary measures, which may, although based on an authorisation, not be limited to a single authorisation.

The omission of a single authorisation requirement should furthermore be seen against developments during the drafting stage of the IPPC Directive. Due mainly to existing domestic administrative arrangements, some Member States opposed both a single authorisation, as well as the concept of a single competent authority as a means to achieve integration.<sup>66</sup> The compromise to ensure integration, in the absence of a

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<sup>62</sup> See also paragraph 4.7 below for a comprehensive discussion on the IPPC Directive authorisation.

<sup>63</sup> Gilhuis 1999 *Milieu en Recht* 283.

<sup>64</sup> See paragraph 2.8 above.

<sup>65</sup> Emmott *IPPC Directive and its Developments* 24.

<sup>66</sup> Emmott *IPPC Directive and its Developments* 35. The competent authority, for the purpose of this study, may include any authority responsible by national legislation for carrying out the obligations arising from the IPPC Directive. See article 2(8) of the IPPC Directive. These may include national, regional (provincial), or local authorities. See in this regard O'Malley 1999 *Sensors and Actuators* 80.

single authorisation and competent authority, is to be found in article 7 of the IPPC Directive. Article 7 requires measures to ensure coordination of authorisation conditions and procedures by stating that:

Member States shall take the measures necessary to ensure that the conditions of, and procedure for the grant of the permit are fully coordinated where more than one competent authority is involved, in order to guarantee an effective integrated approach by all authorities competent for this procedure.<sup>67</sup>

Integration should thus primarily be achieved by way of administrative co-operation and coordination, which should be applicable to authorities, the relevant procedure and the authorisation conditions.<sup>68</sup> It is however also clear that the decision whether to employ a single authorisation, or various authorisations that operate under full coordination by co-operative competent authorities, is left to the discretion of the individual Member States. Integration through co-operation and coordination resorts primarily under organisational integration which is discussed hereafter.

#### 4.4.2 *Organisational integration*

Organisational integration is closely connected to procedural integration, and essentially refers to the administrative structures of the authorisation system.<sup>69</sup> Article 7 of the IPPC Directive is significant in this regard.<sup>70</sup> Where more than one authority is involved in the authorisation procedure, it is essential for the sake of establishing integration, that effective coordination is established between these authorities, and the procedures followed during decision-making.<sup>71</sup> It may also imply that various individual authorisations are integrated, or that administrative functions pertaining to

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<sup>67</sup> O'Malley 1999 *Sensors and Actuators* 79. Jongma *De Milieuvergunning* 43 states that the most effective procedure for issuance of authorisations is that where a lead authority is appointed which should act as a link between industry and other competent authorities. It is clear that a number of authorities may be involved in the issuance of authorisations as long as there is sufficient procedural coordination. Whether this is currently the case in South Africa, is investigated in paragraph 3.2.2.4 above.

<sup>68</sup> Gilhuis 1999 *Milieu en Recht* 283. Article 7 stands in close relationship with the requirement in the preamble of the Directive which states that full coordination of the authorisation procedure and conditions between the relevant competent authorities, will make it possible to achieve the highest practicable level of protection for the environment as a whole. See paragraph 4.3 above. If coordination takes place already during an early stage, eventual coordination of the decision-making process will be made significantly easier. Jongma *De Milieuvergunning* 43.

<sup>69</sup> Bohne and Dietze 2004 *European Environmental Law Review* 200.

<sup>70</sup> See paragraph 4.4.1 above.

<sup>71</sup> Article 7 of the IPPC Directive.

authorisations are at least fully coordinated,<sup>72</sup> in terms of several authorities operating under strong coordination of a lead agent.<sup>73</sup> At least from industry's point of view, this may be regarded as a win-win situation because it may avoid excessive costs imposed by sectoral legislation.<sup>74</sup> The integrated approach may also eliminate the need for duplicity of regulatory controls, which in turn may lead to reduced administrative costs.<sup>75</sup> It may also result in the elimination of add-on technology as a response to each new standard established by sectoral legislation.<sup>76</sup>

It has been stated above that the Directive does not prescribe a single integrated authorisation, but rather a fully coordinated system for authorisations.<sup>77</sup> Integration thus rather entails organisational integration by way of administrative co-operation and coordination.<sup>78</sup> Winter<sup>79</sup> states that this is a rather modest request since it only requires several authorisations to be issued by different authorities by way of coordinated procedures. In this regard, a fully coordinated system, where different authorities are responsible for different environmental aspects, may be more advantageous, since it allows for a comprehensive availability of expertise pertaining to different environmental aspects, whereas this might not have been the case with a single authority or authorisation with competence over the whole environment.<sup>80</sup> A fully coordinated system may also prove to represent all environmental media more comprehensively in decision-making, by not sacrificing one medium for the benefit of another.<sup>81</sup>

Emmott<sup>82</sup> observes that the "...effectiveness of the Directive in achieving improved control relative to single-medium regulation is likely to turn to a significant extent on

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<sup>72</sup> Backes *Introduction* 4-5.

<sup>73</sup> Gilhuis 1999 *Milieu & Recht* 283.

<sup>74</sup> Chalmers 1996 *Yearbook of European Law* 573.

<sup>75</sup> Chalmers 1996 *Yearbook of European Law* 573.

<sup>76</sup> Chalmers 1996 *Yearbook of European Law* 573, further argues that the IPPC Directive may thus be successfully employed as a tool to manage and reduce costs to both the regulator and the regulated. Because of its preventive nature, it may, for example, be used by industry to identify inefficiencies, and to establish methods in which resources may be used more rationally in both ecological and economic sense.

<sup>77</sup> Backes *Introduction* 4-5.

<sup>78</sup> Backes *Introduction* 4-5.

<sup>79</sup> Winter *The IPPC Directive: A German Point of View* 71-72, and Hughes *et al Environmental Law* 519.

<sup>80</sup> Backes *Introduction* 5, and Hughes *et al Environmental Law* 519.

<sup>81</sup> Winter *The IPPC Directive: A German Point of View* 73.

<sup>82</sup> Emmott *IPPC Directive and its Developments* 35.

the way in which this provision [article 7] is respected and enforced".<sup>83</sup> If the coordination obligation is not respected and properly enforced, the holistic and integrated approach of the IPPC Directive may ultimately be negated, since the coordinated authorisation may become little more than an assembly of medium-specific conditions attached physically together.<sup>84</sup> Hughes *et al*<sup>85</sup> concur with this view by stating that all authorities in respect of IPPC must properly coordinate their work to prevent duplication and blurring of responsibilities. It is accordingly argued that article 7 arguably constitutes the fulcrum around which the idea of integration in terms of the IPPC Directive revolves, since the success of the Directive will largely depend on the effective enforcement of the provisions of this provision.

#### 4.4.3 Substantive integration

Substantive integration refers to the content of authorisations and authorisation decisions.<sup>86</sup> Substantive integration requires that all environmental media should be considered as a whole during decision-making, with specific reference to the inter-relationships between the various media.<sup>87</sup> It has been stated above that the IPPC Directive essentially proposes a significantly different approach to the regulation of environmental pollution.<sup>88</sup> This is articulated by the rationale behind the Directive, which aims to establish an integrated strategy to address environmental pollution caused by industrial installations, which fall under the scope of its provisions.<sup>89</sup> 'Integration' in this context, requires a uniform and integrated regulatory approach to the various emissions released by an industrial installation, which should, as opposed to a fragmented approach, view environmental media in an integrated fashion.<sup>90</sup> This means that an activity that may cause pollution must be approached by having regard to various environmental considerations in a uniform and 'horizontal' way.<sup>91</sup> Horizontal environmental legislation, in this context, is the opposite of sectoral legislation that addresses pollution in a fragmented way. Horizontal legislation,

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<sup>83</sup> See also Faure and Lefevre 1996 *European Environmental Law Review* 113.

<sup>84</sup> Emmott *IPPC Directive and its Developments* 35.

<sup>85</sup> Hughes *et al Environmental Law* 519.

<sup>86</sup> Bohne and Dietze 2004 *European Environmental Law Review* 200.

<sup>87</sup> Bohne and Dietze 2004 *European Environmental Law Review* 200.

<sup>88</sup> See paragraphs 4.1-4.3 above.

<sup>89</sup> Faure and Lefevre 1996 *European Environmental Law Review* 112.

<sup>90</sup> Jongma *De Milieuvergunning* 36, and Chalmers 1996 *Yearbook of European Law* 572.

<sup>91</sup> Jongma *De Milieuvergunning* 36.

instead, aims to consider all environmental components, or media, in an integrated fashion.<sup>92</sup> An integrated approach further entails a divergence from the previous traditional environmental protection approach in the EU, where environmental pollution and the effects thereof, were merely shifted from one medium to another.<sup>93</sup> 'Integrated' in this context thus refers to authorisations that must take into account the whole environmental performance of an installation, including activities relating to air, soil and water pollution.<sup>94</sup>

With regard to substantive integration, article 3 furthermore states that an authorisation constitutes the obligatory instrument to control emissions from industrial installations. Certain conditions have to be included in the authorisation,<sup>95</sup> which must at least contain emission limit values.<sup>96</sup> These values must in turn be based on the concept of BAT and must make reference to environmental quality standards.<sup>97</sup> These requirements may enable various authorities to make holistic, cross-media authorisation decisions.<sup>98</sup>

#### 4.4.4 Regional integration

The IPPC Directive may significantly contribute to the attainment of a more integrated approach to pollution prevention and control in the EU itself.<sup>99</sup> This is because the IPPC Directive is an important regional-based instrument, which essentially aims to achieve "...a desired level of environmental quality in a defined area by controlling inputs via all media".<sup>100</sup> Peters,<sup>101</sup> in a discussion on the eventual establishment of a totally integrated environmental framework directive for the EU, is

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<sup>92</sup> Jongma *De Milieuvergunning* 36, and Jans *Relationship between the IPPC Directive and Other EC Environmental Law* 44.

<sup>93</sup> Jongma *De Milieuvergunning* 36, Faure and Lefevre *Integrated Pollution Prevention and Control: An Economic Appraisal* 94, and Faure and Lefevre 1996 *European Environmental Law Review* 112.

<sup>94</sup> Jongma *De Milieuvergunning* 38. See also paragraph 2.8 above.

<sup>95</sup> See paragraph 4.7 below.

<sup>96</sup> By way of emission limit values, best environmental practices may be translated into concrete standards. These conditions may be set as general values or as conditions to individual authorisations. Winter *The IPPC Directive: A German Point of View* 75.

<sup>97</sup> See paragraph 4.8 below.

<sup>98</sup> Bohne and Dietze 2004 *European Environmental Law Review* 201.

<sup>99</sup> O'Malley 1999 *Sensors and Actuators* 78. See also Peters *Environmental Framework Directives* 11-22 for a comprehensive discussion on the role of the IPPC Directive and other directives that may be employed to establish integration at EU level.

<sup>100</sup> Emmott *IPPC Directive and its Developments* 25.

<sup>101</sup> Peters *Environmental Framework Directives* 16-17, 19.

of the opinion that the IPPC Directive may contribute to the achievement of this framework by way of integrated authorisations; uniform emission standards based on BAT in authorisations; harmonisation of BAT and emission standards; uniform emission limit values at EU level for major processes or substances; and a comprehensive list of substances.<sup>102</sup> Emmott<sup>103</sup> concurs with this view when considering the possibility that the IPPC Directive may be interpreted as a framework instrument "...since it provides for common EC emission limits to be adopted at a later date, and creates a new structure within which certain existing quantitative EC standards are to be applied".

It also holds true that emissions from industrial installations may be of a transboundary nature. Transboundary pollution is arguably a matter that concerns most, if not all of the EU Member States. As a uniform framework at EU level, the IPPC Directive may be a useful mechanism to address transboundary pollution in an integrated fashion.<sup>104</sup> The IPPC Directive may also serve as a framework to integrally consider specific environmental standards provided by EU sectoral legislation.<sup>105</sup> The same argument holds true for environmental quality standards, since the IPPC Directive integrates decision-making efforts pertaining to these standards that are contained in sectoral environmental legislation of the EU.<sup>106</sup>

It is clear that the IPPC Directive not only aims to establish a more integrated approach to pollution prevention and control in individual Member States, but also in the whole of the European region. This may contribute significantly to a more uniform, holistic and integrated regional approach to ensure a high environmental quality standard in the EU.

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<sup>102</sup> See paragraph 4.4.4 above. For further reading on a more integrated, coherent and logically structured European approach to environmental concerns, see Peters *Environmental Framework Directives* 11-21.

<sup>103</sup> Emmott *IPPC Directive and its Developments* 29.

<sup>104</sup> Faure and Lefevre *Integrated Pollution Prevention and Control: An Economic Appraisal* 108.

<sup>105</sup> Faure and Lefevre *Integrated Pollution Prevention and Control: An Economic Appraisal* 108.

<sup>106</sup> Faure and Lefevre *Integrated Pollution Prevention and Control: An Economic Appraisal* 108.



#### 4.4.5 *Benefits of the integrated approach*

Benefits which may result from the integrated approach of the IPPC Directive include, *inter alia* that: the historically fragmented pollution control regime that is based on various sectoral acts would be consolidated and integrated; that a uniform and integrated system of environmental standard setting would be established; internalisation of externalities in terms of the cost of pollution is achieved; that integration of various considerations in the decision-making process is achieved; because of integrated decision-making process, no room is left for industry to shift its emissions from one medium to another; an efficient calculation of all costs and benefits is made possible, whether in ecological, or economic terms; it may result in reduction of administrative functions and overlapping of functions, which may in turn result in reduction of administrative costs to both the regulator and the regulated; a speedier and more efficient process for application for permission to commence activities by industry is established.<sup>107</sup> These benefits may ultimately contribute to ensure a high level of protection of the environment as a whole.<sup>108</sup> Moreover, it may contribute significantly to the achievement of sustainable results.<sup>109</sup> In light of the foregoing, it may be derived that the integration effort proposed by the IPPC Directive may be beneficial in economic, administrative and environmental terms.<sup>110</sup>

Subsequent paragraphs reflect on the most important components and aspects of the IPPC Directive that are associated with the various forms of integration discussed above.

#### 4.5 *Scope of application*

The IPPC Directive's provisions are only applicable to certain industrial installations. An installation is defined by article 2(3) of the IPPC Directive as:

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<sup>107</sup> Faure and Lefevre 1996 *European Environmental Law Review* 112-114.

<sup>108</sup> See also paragraphs 4.1-4.3 above for a discussion on some of the benefits posed by an integrated approach to pollution prevention and control.

<sup>109</sup> See paragraph 2.2 above.

<sup>110</sup> For a discussion on an economic analysis of the subsidiarity principle in terms of the IPPC Directive, see Faure and Lefevre 1996 *European Environmental Law Review* 114-117.

...a stationary technical unit where one or more activities listed in Annex I are carried out, and any other directly associated activities which have a technical connection with the activities carried out on that site and which could have an effect on emissions and pollution.

The IPPC Directive applies to energy production,<sup>111</sup> metal processing,<sup>112</sup> mineral production,<sup>113</sup> chemical production,<sup>114</sup> waste management,<sup>115</sup> and other activities, including production of pulp and paper, textiles, tanning, food production and intensive pig and poultry rearing.<sup>116</sup> Whereas these activities may only be carried out from October 1999 onwards at a new installation where the operator of that plant is in possession of an authorisation granted by the competent authority,<sup>117</sup> the provisions of the Directive will only be applicable from 2007 onwards to existing industrial installations.<sup>118</sup>

The IPPC Directive is only applicable to large industrial installations.<sup>119</sup> Smaller industrial installations are excluded from the scope of application and are accordingly not entitled to utilise the benefits of an integrated authorisation system. This

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<sup>111</sup> These include combustion installations with a rated thermal input exceeding 50 MW, mineral oil and gas refineries, coke ovens as well as coal gasification and liquefaction plants. Annex I(1.1-1.4). Wägenbaur and Wainwright 1996 *Yearbook of European Law* 71 emphasise the importance of the IPPC Directive as part of the overall EU energy policy. See also in this regard Cross, Hancher and Slot *EC Energy Law* 288.

<sup>112</sup> These include metal ore roasting or sintering installations, installations for the production of pig iron or steel; installations for the processing of ferrous metals; ferrous metal foundries with a production capacity exceeding 20 tonnes per day; installations for the production of non-ferrous crude metals from ore, concentrates or secondary raw materials, installations for smelting and alloyage of non-ferrous metals, and installations for surface treatment of some metals and plastic materials. Annex I(2.1-2.6).

<sup>113</sup> These include certain installations for the production of cement clinker and lime, installations for the production of asbestos and asbestos-based products, installations for the manufacture of glass and glass fibre with a melting capacity exceeding 20 tonnes per day; certain installations for melting mineral substances and producing mineral fibres, and installations for the manufacture of certain ceramic products. Annex I(3.1-3.5).

<sup>114</sup> These include chemical installations for the production of certain basic organic chemicals; installations for the production of certain basic inorganic chemicals, installations for the production of phosphorous-, nitrogen- or potassium-based fertilisers; installations for the production of basic plant health products and biocides; installations using a chemical or biological process for the production of basic pharmaceutical products, and installations for the production of explosives. Annex I(4.1-4.6).

<sup>115</sup> These include certain installations responsible for the disposal and recovery of hazardous waste, certain installations responsible for the incineration of municipal waste, certain installations responsible for the disposal of non-hazardous waste, and landfills receiving more than 10 tonnes per day or with a capacity exceeding 25,000 tonnes. Annex I(5.1-5.4)

<sup>116</sup> Annex I(6.1-6.8). See also Hughes *et al Environmental Law* 517, and Chalmers 1996 *Yearbook of European Law* 574.

<sup>117</sup> Hughes *et al Environmental Law* 517, Chalmers 1996 *Yearbook of European Law* 575, and O'Malley 1999 *Sensors and Actuators* 79.

<sup>118</sup> Hughes *et al Environmental Law* 517, Chalmers 1996 *Yearbook of European Law* 575, and O'Malley 1999 *Sensors and Actuators* 79.

<sup>119</sup> This may be apparent from the classification of the six sectors of industry to which the IPPC Directive applies. See also Jongma *De Milieuvergunning* 40.

exclusion may be regarded as a significant shortcoming of the Directive, since smaller industrial installations may also contribute to environmental pollution. Discussions are however underway to ascertain the possibility to extend the provisions of the IPPC Directive, albeit in a revised form, to the activities of smaller installations.<sup>120</sup>

A further shortcoming is that the article 2(3) definition of 'installation' only refers to a stationary unit, which excludes mobile installations, thus limiting the application of the IPPC Directive again to only certain installations.<sup>121</sup> The definition of 'installation' is furthermore restricted, because there should be a technical and direct coherence, if activities are essential for primary production.<sup>122</sup> In those instances where there is only an organisational connection with secondary industrial installations, the latter will therefore not fall within the ambit of the definition of an installation. The definition however, commendably so, includes secondary effects from industrial pollution since it refers to activities which could have an effect on pollution and emissions.

#### ***4.6 The basic obligations of the operator***

Article 3 of the IPPC Directive sets out the basic principles governing the obligations of operators of installations.<sup>123</sup>

An operator is defined by article 2(12) as:

...any natural or legal person who operates or controls the installation or, where this is provided for in national legislation, to whom decisive economic power over the technical functioning of the installation has been delegated.

This is a wide definition, which arguably aims to encompass as many operators as possible. This may be significant, particularly insofar as the definition draws in all possible natural and legal persons who may be held liable for compensation for environmental and other damage in terms of domestic legislation of the Member States.

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<sup>120</sup> Jongma *De Milieuvergunning* 40-41.

<sup>121</sup> Jongma *De Milieuvergunning* 41.

<sup>122</sup> Jongma *De Milieuvergunning* 41.

<sup>123</sup> Long and Mereu 1999 *European Environmental Law Review* 181.

Article 3 of the IPPC Directive places an obligation on competent authorities in each Member State to ensure, through necessary measures, that operators of installations observe and conduct their activities according to certain general principles.<sup>124</sup> Although article 3 specifically refers to the basic obligations of the operator, the principles are also directed at the competent authority.<sup>125</sup> The general principles are not meant to articulate a predetermined result. The intention is rather to guide the eventual authorisation decision, and therefore also the competent decision-making authority.<sup>126</sup> These general principles include: taking all appropriate preventive measures against pollution through the application of BAT;<sup>127</sup> ensuring no significant pollution is caused; avoiding waste production and where it is produced, recovering and disposing of waste in a safe way; using energy in an efficient manner; taking necessary measures to prevent accidents and minimise their consequences; and upon cessation of activities, ensuring that the site is in a satisfactory state so as to avoid any future pollution risks.<sup>128</sup> The principles espoused by this article, generally conform to the overall objectives of the IPPC Directive as set out in the preamble.<sup>129</sup> It furthermore accords with general environmental principles, usually relied upon to facilitate a high level of environmental protection.<sup>130</sup>

Emmott<sup>131</sup> however points out some discrepancies, contradictions and shortcomings in article 3 which may negate the effectiveness of the IPPC Directive. The wording of article 3 suggests there is a continuous obligation on operators to satisfy the

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<sup>124</sup> It should be noted that the general principles are applicable to new and existing installations. Jongma *De Milieuvergunning* 53.

<sup>125</sup> Jongma *De Milieuvergunning* 52.

<sup>126</sup> This may entail that some general principles may be afforded greater weight than other principles by the competent authority during the decision-making process. Jongma *De Milieuvergunning* 53.

<sup>127</sup> Lange 2002 *European Law Journal* 253, and Long and Mereu 1999 *European Environmental Law Review* 181.

<sup>128</sup> Article 3(a)-3(f) and Hughes *et al Environmental Law* 517, and Long and Mereu 1999 *European Environmental Law Review* 181.

<sup>129</sup> See paragraphs 4.1-4.3 above.

<sup>130</sup> See, for example, the principles of sustainability discussed in paragraph 2.2 above.

<sup>131</sup> Emmott *IPPC Directive and its Developments* 34. It should also be noted that whereas the introduction to article 3 states that Member States *shall* (emphasis added) take the necessary measures, subsequent provisions thereof merely state that, for the purposes of compliance to this article, it shall be *sufficient* (emphasis added) if Member States ensure that the competent authorities *take account of* (emphasis added) the general principles. The latter phrase may negate this obligation on Member States and competent authorities, because compliance with the general principles is reduced to mere recognition and not so much effective enforcement. The success of the article 3 principles may accordingly depend to a large extent on effective enforcement and implementation thereof by the relevant competent authority. This may hamper a uniform EU approach to IPPC, since competent authorities in the different Member States may not necessarily have the same competence, objectives, resources, capacity, or dedication to enforce the principles.

principles, regardless of conditions set out in the authorisation.<sup>132</sup> Translated into practice, this may mean that if an operator becomes aware of any additional measures to prevent pollution, any obligations to implement them will arise not from the authorisation, but independently from the authorisation.<sup>133</sup> This may arguably entail that operators are only required to comply with authorisation conditions and no additional obligations whatsoever that may function outside the scope of the authorisation. Furthermore, the wording of article 3 is such that the obligations on operators are directed mostly to the relevant competent authority in the Member State. Adherence to, and compliance with, these principles will accordingly largely depend on the competence and effectiveness of the competent authority and not necessarily the operator.

#### 4.7 *The IPPC Directive authorisation*

Articles 4 and 5 of the IPPC Directive provide that all new and existing installations should be operated with an authorisation which must be issued in accordance with the provisions of the Directive.<sup>134</sup> These articles essentially establish a system of prior authorisation, and may be regarded as the centrepiece of the IPPC Directive.<sup>135</sup> The

<sup>132</sup> Emmott *IPPC Directive and its Developments* 34.

<sup>133</sup> Emmott *IPPC Directive and its Developments* 34.

<sup>134</sup> Article 5 is applicable to existing installations. It provides for the application of the IPPC Directive to existing installations by stating that such installations should operate in accordance with the requirements of articles 3, 7, 9, 10, 13, the first and second indents of article 14, and article 15(2), not later than eight years after the date on which the IPPC Directive is brought into effect. Member States must provide for measures to reconsider and, where necessary, to update existing authorisation conditions in order to ensure compliance. Measures should furthermore be taken by Member States to ensure compliance by existing installations with articles 1, 2, 11, 12, 14, third indent, 15(1), 15(3), 15(4), 16, 17 and 18(2) as from the date on which the IPPC Directive is brought into effect. See also Hughes *et al Environmental Law* 517, and Chalmers 1996 *Yearbook of European Law* 575. It may be unclear in certain instances whether an installation should be regarded as new or existing. For example, the case where an installation has already been built, but has not come into operation, or those instances where the activities of the installation have been authorised in terms of the pre-1996 regime. Article 2(4) leaves this determination to the discretion of the relevant competent authority, which has to ascertain whether the installation has been the subject of a full request for authorisation or not. See Emmott *IPPC Directive and its Developments* 30 in this regard. If, however, the activities of the installation in question have been subject to a full request for authorisation, and the installation has been put into operation no later than one year after 30 October 1996, the installation will be regarded as an existing installation. See article 4(2) and Pallemarts 1996 *European Environmental Law Review* 178. See for a further discussion on the IPPC authorisation, Larmuseau *De IPPC Richtlijn* 18-38.

<sup>135</sup> Chalmers 1996 *Yearbook of European Law* 574, Faure and Lefevre 1996 *European Environmental Law Review* 118, and Long and Mereu 1999 *European Environmental Law Review* 180. See also Faure and Lefevre 1996 *European Environmental Law Review* 118-119, 122, and paragraph 4.12 below for a discussion of some disadvantages that may be presented by the fact that the IPPC Directive only opts for one regulatory instrument in the form of an authorisation. These authors specifically argue that the IPPC Directive should not rely too heavily on authorisations as the sole regulatory

authorisation must contain emission standards to be set on the BAT parameter and has as its main objective to prevent, or where impracticable, reduce emissions to air, land and water.<sup>136</sup> In terms of the IPPC Directive, an authorisation will be a part, or the whole, of a written decision or series of them together, which grants authorisation to operate all, or any, part of an installation subject to conditions which ensure that the plant complies with the requirements of the Directive.<sup>137</sup>

Article 6 sets out provisions pertaining to the application for authorisations.<sup>138</sup> It provides that Member States must take the necessary measures to ensure that an application to the competent authority for an authorisation includes a description of: the installation and its activities; the raw and auxiliary materials, other substances and the energy used in, or generated by, the installation; the sources of emissions from the installation; the conditions of the site of the installation; the nature and quantities of foreseeable emissions from the installation into each medium, as well as identification of significant effects of the emissions on the environment; the proposed technology and other techniques for preventing or, where this is not possible, reducing emissions from the installation; where necessary, measures for the prevention and recovery of waste generated by the installation; further measures planned to comply with the general principles of the basic obligations of the operator as provided for in Article 3; and measures planned to monitor emissions into the environment. Since a significant part of the foregoing information is of a highly technical nature, it is also required that the application must include a non-technical summary of the aforementioned.<sup>139</sup> Information required by the *Directive on the Assessment of the Effects of Certain Public and Private Projects on the Environment* 1988,<sup>140</sup> a safety report pertaining to major hazardous accidents of certain industrial activities in terms of the *Directive on*

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instrument, since an integrated approach may also be achieved by way of other administrative and economic instruments.

<sup>136</sup> See Long and Mereu 1999 *European Environmental Law Review* 180, and paragraph 4.8 below for a discussion on BAT.

<sup>137</sup> Article 2(9) and Hughes *et al Environmental Law* 517. See paragraph 4.4 above on the question whether the IPPC Directive establishes a single integrated authorisation or not.

<sup>138</sup> Hughes *et al Environmental Law* 517-518, Chalmers 1996 *Yearbook of European Law* 575 and Long and Mereu 1999 *European Environmental Law Review* 181. Article 6 is applicable to its full extent with regard to new installations. As far as existing installations are concerned, the objectives of article 6 may however also be achieved on the basis of article 5(1), which provides that competent authorities may, where appropriate, reconsider or update authorisation conditions. See in this regard Jongma *De Milieuvergunning* 54.

<sup>139</sup> Hughes *et al Environmental Law* 518, and O'Malley 1999 *Sensors and Actuators* 79.

<sup>140</sup> *Directive on the Assessment of the Effects of Certain Public and Private Projects on the Environment* 85/337/EEC OJ L 175, 05.07.1998.

*Major Accident Hazards of Certain Industrial Activities (Seveso)* 1982,<sup>141</sup> as well as any other information required by any other relevant legislation may also be included in the application.<sup>142</sup>

The authorisation application should contain all the aforementioned elements, even if the application concerns only a single environmental medium. The rationale behind this might be to ensure that authorities, who are only concerned with a single environmental medium, appreciate the full extent of environmental concerns in a holistic manner.<sup>143</sup> It is also important to note that the detail on the provisions in article 6 to be provided by the applicant, will largely depend on the magnitude of the installation as well as the complexity of its activities.<sup>144</sup>

The competent authority may only grant an authorisation if it is satisfied that, without prejudice to any other domestic or EU legislation, the authorisation conditions guarantee that the installation complies with the overall requirements of the IPPC Directive.<sup>145</sup> Where more than one competent authority is involved in the decision-making process, they are required to perform their respective functions in an integrated and fully coordinated fashion.<sup>146</sup> If the competent authority is not satisfied with the authorisation application, no authorisation may be granted in terms of article 8. Initially, a time limit of six months for decision-making by the competent authority was included in a draft text of the IPPC Directive.<sup>147</sup> This provision has however not been included in the final version. This may mean that the applicant may be subjected to possible unreasonable coercive behaviour by the competent authority during the

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<sup>141</sup> *Directive on Major Accident Hazards of Certain Industrial Activities (Seveso)* 82/501/EEC OJ L 230, 05.08.1982.

<sup>142</sup> Article 6(2). Emmott *IPPC Directive and its Developments* 36 wrongly states that this information must be included. Article 6(2) does not formulate the inclusion of this additional information as an obligation, since it merely states that it *may* (emphasis added) be included.

<sup>143</sup> Jongma *De Milieuvergunning* 54, and paragraph 2.8 above.

<sup>144</sup> Jongma *De Milieuvergunning* 55. Chalmers 1996 *Yearbook of European Law* 576-577 points out a number of weaknesses inherent in the application procedure. Firstly, the Directive does not provide any means for the competent authority to assess how the operator came to its conclusions in terms of the information submitted in the application. Secondly, the Directive makes no provision for consultation with the workforce or other interested and affected parties in drawing up of the application itself.

<sup>145</sup> Article 8, and Hughes *et al Environmental Law* 518. This provision must be read together with article 3 that sets out general principles in terms of which the competent authority must ensure that installations are operated in a certain way. See Chalmers 1996 *Yearbook of European Law* 577, and paragraph 4.6 above in this regard.

<sup>146</sup> Article 7, Hughes *et al Environmental Law* 518, and paragraphs 5.4.1 and 5.4.2 above.

<sup>147</sup> Emmott *IPPC Directive and its Developments* 36.

decision-making process. Although provisions in domestic legislation may arguably address these issues, this omission may place the transparency and efficiency of the decision-making process by competent authorities in a questionable light.<sup>148</sup>

Article 9(7) gives discretion to Member States and competent authorities to detail any additional requirements in respect of the authorisation which they deem necessary to achieve the objectives of the IPPC Directive. This means that stricter conditions may be prescribed if so required. Article 9(8) also provides that requirements for certain categories of installations may be prescribed by way of general binding rules, instead of including them in individual authorisation conditions.<sup>149</sup> Although no indication is given in this article as to which installations are referred to, the general rules must ensure an integrated approach and an equivalent high level of environmental protection.<sup>150</sup>

#### **4.8 Best available techniques**

Emission limit values, parameters or equivalent technical measures should be based on BAT.<sup>151</sup> The IPPC Directive is the first EU directive to introduce the concept of BAT in EU environmental law and as such, BAT represents one of the most important instruments to achieve IPPC.<sup>152</sup> BAT is a process, or specification standard, used to

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<sup>148</sup> See also Chalmers 1996 *Yearbook of European Law* 580-582 in this regard.

<sup>149</sup> Article 9(8) is the second of two derogations allowed from provisions on individual authorisations. Emmott *IPPC Directive and its Developments* 38, suggests that general rules may only be suitable for installations characterised by little complexity or variability. See also in this regard Jongma *De Milieuvergunning* 85-86.

<sup>150</sup> Article 9(8). See also chapter 6 below on the role of general rules in the Dutch legal system.

<sup>151</sup> Preamble of the IPPC Directive, Hilson *Regulating Pollution* 102-103, Lange 2002 *European Law Journal* 253, and Long and Mereu 1999 *European Environmental Law Review* 180-181. See Chalmers 1996 *Yearbook of European Law* 578-580, Pallemarts 1996 *European Environmental Law Review* 175-176, Faure and Lefevre 1996 *European Environmental Law Review* 119-121 and Krämer *EC Environmental Law* 157-161, for a more in-depth discussion on the concept of BAT in terms of the IPPC Directive. Faure and Lefevre 1996 *European Environmental Law Review* 119, state that BATNEEC has been adopted in various EU directives. BATNEEC, will however over a period of time be replaced by BAT as established and defined in the IPPC Directive. See also paragraph 2.8 above. It should also be noted that where an environmental quality standard requires stricter conditions than those presented by BAT, further measures must be taken to comply with the environmental quality standard clause in article 10. See in this regard Long and Mereu 1999 *European Environmental Law Review* 181. See for a further discussion on BAT, Larmuseau *De IPPC Richtlijn* 38-43.

<sup>152</sup> Jongma *De Milieuvergunning* 56. See also Backes *Introduction* 2-3 for a discussion on some of the possible shortcomings that may be presented by BAT in terms of the IPPC Directive.



specify the use of, or abstention from, certain technologies, materials or practices.<sup>153</sup> In determining BAT, it is required to take into account the overall effect of activities on the whole environment, which includes a comprehensive consideration of pollution on all environmental media.<sup>154</sup> In this context, BAT should specifically aim to avoid emissions at the start of the production process. This may contribute to avoid the scenario where 'end-of-pipe' technologies are used instead, in order to ascertain after the production phase, how emissions may be avoided.<sup>155</sup> BAT also serves as a benchmark for determining the obligations of industrial operators in respect of pollution prevention and control.<sup>156</sup>

It is not required that the use of one specific technique or technology should be prescribed.<sup>157</sup> What should rather be considered, are the technical characteristics of the installation, its geographical location, local environmental conditions, as well as the precautionary and preventive principles.<sup>158</sup> BAT is defined by the IPPC Directive as:

...the most effective and advanced stage in the development of activities and their methods of operation which indicate the practical suitability of particular techniques for providing in principle the basis for emission limit values designed to prevent and, where that is not practicable, generally reduce emissions and the impact on the environment as a whole.<sup>159</sup>

Translated into practice, BAT prescribes the technology to be used as the technology "...where the marginal costs of this technology equal the marginal benefits in reduced environmental damage".<sup>160</sup> Whereas 'techniques' include technology used and the

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<sup>153</sup> Wilkinson *Environment and Law* 138-139. Process standards have several disadvantages. These include that they may be overly prescriptive of the manufacturing process; they may be difficult to relate to a specific environmental outcome or goal; and they may inhibit innovation and become quickly outdated. This is however not the case with BAT, since it expresses standards in terms of a general goal coupled with guidelines for the interpretation of that goal for different classes of operators. See Wilkinson *Environment and Law* 139.

<sup>154</sup> Jongma *De Milieuvergunning* 58.

<sup>155</sup> Jongma *De Milieuvergunning* 58.

<sup>156</sup> O'Malley 1999 *Sensors and Actuators* 80.

<sup>157</sup> Preamble of the IPPC Directive.

<sup>158</sup> Jongma *De Milieuvergunning* 58, and Pallemarts 1996 *European Environmental Law Review* 176. The determination of how the technical characteristics, geographical location and local environmental conditions are to be taken into consideration is left to the discretion of the Member States. See in this regard the preamble of the IPPC Directive.

<sup>159</sup> Article 2(11).

<sup>160</sup> Faure and Lefevre *Integrated Pollution Prevention and Control: An Economic Appraisal* 114. The concepts of BPEO, which is provided for in the NEMA, as well as BATNEEC are also connected with economic, cost and benefit considerations. Backes *Introduction* 2. These considerations have been transferred more or less to the concept of BAT. It follows that BAT, in the context of the IPPC

way in which the installation is designed, built, maintained, operated and decommissioned, 'available' refers to techniques developed on a scale which allows implementation in the relevant industrial sector under economically and technically viable conditions.<sup>161</sup> The latter should take into consideration costs and advantages, as long as they are reasonably accessible to the operator, regardless of whether or not the techniques are used or produced in the Member State.<sup>162</sup> Some questions however arise as to the interpretation of 'available'. The availability of techniques must be considered with due regard to economically and technically viable conditions, and by taking into account costs and advantages, or environmental benefits.<sup>163</sup> Economic viability and balancing of costs and environmental benefits, accordingly seem to be the crux of the 'availability' of techniques.<sup>164</sup> Whilst a technique will only be available if it is considered to be affordable,<sup>165</sup> such a technique must also, based on proportionality, be viable. This entails that it will not be considered available if its employment to reduce pollution may lead to excessive costs.<sup>166</sup> 'Best' is defined as meaning "...most effective in achieving a high general level of protection of the environment as a whole".<sup>167</sup> The items listed in Annex IV should specifically be considered in determining the BAT.<sup>168</sup> Where stricter conditions than those

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Directive, resembles characteristics of BPEO as well as BATNEEC and that the IPPC Directive has introduced no significant changes in this regard. Emmott *IPPC Directive and its Developments* 33, points out that BAT, as the basic technological requirement, appears *prima facie* to be more demanding than the standard of BATNEEC employed in previous EU environmental directives. BAT however resembles BATNEEC more closely due to the fact that the techniques in question should be economically and technically viable by taking into account costs and benefits. See also Hughes *et al Environmental Law* 501-506.

<sup>161</sup> Article 2(11), Lange 2002 *European Law Journal* 253, and Long and Mereu 1999 *European Environmental Law Review* 181.

<sup>162</sup> Article 2(11). Annex IV also includes as factors in this determination, the preventive and precautionary principles.

<sup>163</sup> Article 2(11).

<sup>164</sup> Backes *Introduction* 2 states that although economic viability is of the essence in the determination of BAT, where there is significant damage to the environment or health, economic viability should not be the overriding factor.

<sup>165</sup> Winter *The IPPC Directive: A German Point of View* 69.

<sup>166</sup> Winter *The IPPC Directive: A German Point of View* 69.

<sup>167</sup> Article 2(11), and Long and Mereu 1999 *European Environmental Law Review* 181.

<sup>168</sup> Article 2(11). Annex IV details the following items to be considered in addition to costs, benefits and the precautionary and preventive principles, when determining BAT: the use of low-waste technology; the use of less hazardous substances; the promotion of recovery and recycling of substances generated and used in the process and of waste where appropriate; comparable processes, facilities or methods of operation which have been tried with success on an industrial scale; technological advances and changes in scientific knowledge and understanding; the nature, effects and volume of the emissions concerned; the commissioning dates for new or existing installations; the length of time needed to introduce the BAT; the consumption and nature of raw materials used in the process and their energy efficiency; the need to prevent or reduce to a minimum the overall impact of the emissions on the environment and the risks to it; the need to prevent accidents and to minimise the

achievable by BAT are required by an environmental quality standard, additional measures must, without prejudice to other measures which might be taken, be required in the authorisation.<sup>169</sup>

Provisions pertaining to emission limit values stand in close relationship with the BAT provisions of the IPPC Directive.<sup>170</sup> Emission limit values are defined by article 2(6) as:

...the mass, expressed in terms of certain specific parameters, concentration and/or level of an emission, which may not be exceeded during one or more periods of time. Emission limit values may also be laid down for certain groups, families or categories of substances, in particular for those listed in Annex III.

Article 9(3) provides that emission limit values for pollutants, with specific emphasis on the pollutants listed in Annex III, be included in the authorisation.<sup>171</sup> These values should be based on BAT.<sup>172</sup> In determining emission limit values, the relevant competent authority will commence with an evaluation of BAT standards established at European level.<sup>173</sup> A specific emission limit value is then afforded to the selected technique. The emission limit values are established in principle in the authorisation. The relevant competent authority must however determine whether a stricter emission limit value must be afforded by way of determining the local environmental circumstances. The competent authority may not prescribe a less strict emission limit value than is provided for in terms of BAT.<sup>174</sup>

BAT is a dynamic concept, which may change in time.<sup>175</sup> In this regard and especially in light of technological advances, the IPPC Directive further provides that Member States must ensure that competent authorities constantly monitor, follow, and

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consequences for the environment and the information published by the EC pursuant to article 16(2)- which provides for the exchange of information- or by other international organisations.

<sup>169</sup> Article 10.

<sup>170</sup> Article 9(4) and 10.

<sup>171</sup> These pollutants include, amongst others: sulphur dioxide and other sulphur compounds; oxides of nitrogen and other nitrogen compounds; carbon monoxide; volatile organic compounds; metals and their compounds; dust; asbestos; chlorine; fluorine; arsenic; and cyanides.

<sup>172</sup> Article 9(4).

<sup>173</sup> See paragraph 4.8 below for a detailed discussion on BAT and accompanying emission limit values at EU level.

<sup>174</sup> See further article 9(4) and paragraph 4.8 below.

<sup>175</sup> Jongma *De Millevergunning* 40.

be informed of developments concerning BAT.<sup>176</sup> These provisions are arguably meant to enable continuous development and revision of existing techniques to ensure a progressively high level of environmental protection. Due to different environmental circumstances, different BAT standards may furthermore apply in different EU countries.<sup>177</sup> This may also be attributed to more comprehensive implementation of the precautionary principle in some states than in others, and the differing local circumstances in the various Member States.<sup>178</sup> The IPPC Directive does not explicitly indicate whether the concept of BAT should be regarded as a uniform EU concept. It may however be derived from, *inter alia*, articles 9, 16 and 18 that it is the intention of the Directive to establish uniformly applicable BAT standards throughout the EU.<sup>179</sup> In this regard, article 18(1) of the IPPC Directive provides for the eventual establishment of EU emission limit values which should be based on the exchange of information in terms of article 16.<sup>180</sup> It is further argued in this regard that a stricter approach in light of the BAT requirements should be applied throughout EU Member States; an approach which is in conformity with the precautionary principle articulated by article 130T of the EC Treaty.<sup>181</sup> Together with a consideration of local circumstances,<sup>182</sup> and regional cost-benefit comparisons, this may contribute significantly to the eventual establishment of a single and uniform EU-based BAT standard, which in turn, may promote regional integration.<sup>183</sup>

#### 4.9 Changes by operators to installations

Where a change in the operation of an installation is planned, the operator is obliged to inform the relevant competent authority of the changes.<sup>184</sup> A change in operation is defined by article 2(10)(a) as a change in the nature or the functioning of the

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<sup>176</sup> Article 11.

<sup>177</sup> This is, for example, the case in Germany where a stricter approach is followed which conforms more to the precautionary principle. See in this regard Backes *Introduction* 2.

<sup>178</sup> Backes *Introduction* 2.

<sup>179</sup> This may entail that individual industrial economic circumstances will not play a role in the determination of BAT standards. See in this regard Jongma *De Milieuvergunning* 58-60. See also Lange 2002 *European Law Journal* 254, and Backes *Introduction* 3.

<sup>180</sup> See also paragraph 4.11 below.

<sup>181</sup> Backes *Introduction* 2.

<sup>182</sup> Jongma however holds a different view. The author is of the opinion that BAT standards should be established on a sectoral and not local basis. See in this regard Jongma *De Milieuvergunning* 60-61.

<sup>183</sup> Backes *Introduction* 2-3. See also paragraph 4.4.4 above for a discussion on the role that BAT may play in terms of regional integration in the EU.

<sup>184</sup> Article 12(1).

installation, or an extension of the installation, which may have consequences for the environment. The competent authority must update the authorisation or the conditions thereof where appropriate.<sup>185</sup> A change in operation is attributed a wide definition by this article, since any change in operation is to be measured against the question whether the change may have consequences to the environment. The possible consequences are not qualified. This may imply that authorisations and authorisation conditions would have to be revised each time that the change has a consequence for the environment, whether significant or not. Seen in the context of the objective of the IPPC Directive, which, *inter alia*, aims to achieve a high level of environmental protection, this widely applicable provision should be welcomed.<sup>186</sup>

Where a substantial change in operation is planned, articles 2(10)(b) and 12(2) provide more strict requirements. 'Substantial change' is defined by article 2(10)(b) as a change in operation, which, in the opinion of the competent authority, may have significant negative effects on human beings or the environment.<sup>187</sup> A substantial change in operation must be authorised in terms of article 12(2). These provisions clearly relate to activities, which may have more serious adverse effects on the environment and human beings. Understandably, any such activities need to be regulated more strictly by an authorisation, by taking into account the provisions of articles 3, 6 to 10, 15(1), 15(2) and 15(4).<sup>188</sup>

#### **4.10 *Reconsideration, updating of, and compliance with authorisation conditions***

In terms of article 13, competent authorities are under a continuous obligation to periodically reconsider, and where necessary, update existing conditions in authorisations.<sup>189</sup> Reconsideration must be done in the following instances: where the

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<sup>185</sup> Article 12(1).

<sup>186</sup> This said, it must however be noted that a continuous obligation is placed on competent authorities by this provision, to regularly conduct monitoring of installations and their activities. The latter may imply additional administrative burdens on competent authorities. This may however be addressed by requiring regular reporting, in terms of article 14, and by co-operating and coordinating administrative activities in terms of article 7. See also paragraph 4.4 above.

<sup>187</sup> It is interesting to note that human beings are included in this definition, whilst it is excluded from the definition of article 2(10)(a). This inclusion is arguably aimed at a further extension of the application of the provision.

<sup>188</sup> The authorisation application, as well the decision by the competent authority, must cover the parts of the installation and the aspects listed in article 6.

<sup>189</sup> Article 13(1), and Long and Mereu 1999 *European Environmental Law Review* 181.

pollution caused by the installation is of such significance that existing emission limit values need to be revised or new values included; where substantial changes in BAT make it possible to reduce emissions significantly without imposing excessive costs; where the operational safety of the process or activity requires other techniques to be used; and where new EU provisions or provisions of domestic legislation indicate and require a reconsideration.<sup>190</sup>

Article 13 unfortunately does not define 'periodically'. This omission may result in authorisation conditions not being reviewed and modified on a regular basis, in accordance with continuously changing industrial activities, BAT, and environmental conditions.<sup>191</sup> It may also render obsolete the provisions contained in articles 10 and 11, which require competent authorities to continuously amend authorisation conditions according to BAT's development.

In terms of article 14, Member States must furthermore take necessary measures to ensure that operators comply with authorisation conditions. Operators must, in addition, inform the relevant competent authority, on a regular basis, of monitoring results of releases, without delay. Operators must also assist competent authorities during inspections of the installation, sample-taking and the provision of any information necessary for the performance of their duties in terms of the IPPC Directive. Emmott<sup>192</sup> notes in this regard that operators are not obliged to report non-compliance with authorisation conditions. This omission is questionable when viewed against the overall objectives of the IPPC Directive.

#### **4.11 Provisions on information**

Articles 15(1)-15(3) set out provisions pertaining to access to information and public participation during the authorisation procedure.<sup>193</sup> The provisions of Directive 90/313/EEC<sup>194</sup> on the freedom of access to information on the environment may be

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<sup>190</sup> Article 13(2), and Long and Mereu 1999 *European Environmental Law Review* 181.

<sup>191</sup> See also Emmott *IPPC Directive and its Developments* 34 in this regard.

<sup>192</sup> Emmott *IPPC Directive and its Developments* 38.

<sup>193</sup> See also Larmuseau *De IPPC Richtlijn* 24-28.

<sup>194</sup> Articles 3(2) and 3(2) of Directive 90/313/EEC qualify the requirement on information, by providing that, *inter alia*, commercial confidential information may be withheld. See also article 15(4) of the IPPC Directive.

regarded as the cornerstone of article 15 of the IPPC Directive. Before the competent authority reaches a final decision, all applications for authorisations must be made available to the public for an appropriate period to allow for comments.<sup>195</sup> This obligation includes the public availability of results of release monitoring.<sup>196</sup> An inventory of principal emissions and sources responsible for pollution must furthermore be compiled and published every three years by the EC.<sup>197</sup> Article 15 has also been amended in 2003 in order to ensure compliance with the provisions of the Aarhus Convention, which provides for access to justice and protection of private sector parties in their interaction with administrative authorities.<sup>198</sup>

Further provisions essentially relate to the exchange of information regarding national assessment of BAT and emission limit values between Member States.<sup>199</sup> The exchange of information has as its main objective to assist Member States in the implementation of the provisions of the IPPC Directive.<sup>200</sup> Information exchange on BAT, associated monitoring and further developments therein, should also be organised between industry and Member States.<sup>201</sup> These provisions led to the establishment of the European Integrated Pollution Prevention and Control Bureau (hereafter EIPPCB) in 1997.<sup>202</sup> It is required of the EIPPCB to provide the EC with scientific and technical support during the exchange of information.<sup>203</sup> A number of BAT-reference documents (hereafter BREF) have been created as a result of the

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<sup>195</sup> The decision, authorisation and subsequent updates must also be made publicly available. Article 15(1).

<sup>196</sup> Article 15(2).

<sup>197</sup> The inventory is to be based on the required data supplied by Member States. Article 15(3).

<sup>198</sup> It is noted that these enhanced public participation and access to justice provisions are also related to aspects of procedural integration. See paragraph 4.4.1 above. The extent of the amendment includes an insertion of article 15(a) which states, *inter alia*, that Member States must ensure that members of the public who may have an interest in administrative procedural law, must have access to a review procedure before a court of law or an impartial tribunal. Annex V has also been added. This annex sets out provisions pertaining to public participation in decision-making. The provisions of annex V have been formulated alongside the provisions of the Aarhus Convention. See further, Office for Official Publications of the European Communities [http://europa.eu.int/eur-lex/en/consleg/pdf/1996/en\\_1996L0061\\_do\\_001.pdf](http://europa.eu.int/eur-lex/en/consleg/pdf/1996/en_1996L0061_do_001.pdf) [20 June 2005].

<sup>199</sup> Article 16(1). See also Farthing, Marshall, Kellett *Pollution Prevention and Control* 23, and paragraph 4.11 below.

<sup>200</sup> Jongma *De Milieuvergunning* 72.

<sup>201</sup> Article 16(2).

<sup>202</sup> Farthing, Marshall and Kellett *Pollution Prevention and Control* 23, and Long and Mereu 1999 *European Environmental Law Review* 182.

<sup>203</sup> Farthing, Marshall and Kellett *Pollution Prevention and Control* 23, and Jongma *De Milieuvergunning* 71.

former development.<sup>204</sup> These documents aim to detail the techniques which may be regarded as BAT for different sectors in industry.<sup>205</sup> To date, ten documents have been finalised and a number of documents for various other sectors are in the process of being drafted.<sup>206</sup> The provisions on exchange of information, as well as the aforementioned BREFs may contribute significantly to the eventual establishment of common EU standards, and hence contribute to enhance regional integration.

#### **4.12 The IPPC Directive and future developments**

Drafting of legislation is usually a long process, characterised by complicated negotiations and compromises. This is equally true for the establishment of EU environmental directives, which are in many instances less clear, comprehensive and consistent than environmental legislation in Member States.<sup>207</sup> Although a number of contentious issues have been settled during the drafting process of the IPPC Directive, many questions still remain with regard to the content and transposition of its provisions.<sup>208</sup> Some of the evident shortcomings, questions and uncertainties as to the interpretation and implementation of the Directive's provisions have been discussed above.<sup>209</sup>

Further critical issues relating specifically to the relationship between the IPPC Directive, EIA, planning law, EU environmental law and other environmental management instruments, remain open for discussion. The relationship between the

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<sup>204</sup> Lange 2002 *European Law Journal* 254 notes that the EC has interpreted article 16 in such a way that one technical guidance document, namely a BREF is written for each of the sectors covered by the IPPC Directive. Although these are not legally binding documents, it is envisaged that the BREFs may contribute to establish uniform community-based BAT standards in future. A comprehensive examination of the BREFs does not fall in the scope of this study. A comprehensive discussion on the establishment, content and status of these documents can be found in Jongma *De Milieuvergunning* 71-76, Lange 2002 *European Law Journal* 253-268, Long and Mereu 1999 *European Environmental Law Review* 182, and Krämer *EC Environmental Law* 160-161. See also paragraph 4.11 below.

<sup>205</sup> Jongma *De Milieuvergunning* 71.

<sup>206</sup> The finalised documents address the following sectors: pulp and paper manufacture, iron and steel production, cement and lime production, cooling systems, chlor-alkali manufacture, ferrous metal processing, non-ferrous metal processes, glass manufacture, tanning of hides and skins and refineries.

<sup>207</sup> Backes *Introduction* 1.

<sup>208</sup> Backes *Introduction* 1.

<sup>209</sup> See paragraphs 4.4-4.11 above. Questions and uncertainties arising from the provisions of the IPPC Directive are not only relevant for their academic value. The practical relevance of a critical analysis is apparent from the fact that national courts in EU states as well as the EC, must ultimately consider whether domestic interpretation and enforcement of the IPPC Directive's provisions meet all the requirements of the Directive.



IPPC Directive authorisation, EIA and planning permissions is a matter of concern. In this context, it is significant that EIAs have a different function in the various EU Member States. Whereas EIA functions primarily as a system for environmental authorisations in some jurisdictions, in others, especially the UK, it is concerned with city and town planning.<sup>210</sup> The relationship between the IPPC Directive and other directives and instruments of environmental regulation accordingly remains unclear.

As has been stated earlier, the IPPC Directive provides exclusively for a 'command and control' type of regulation, by reinforcing administrative control.<sup>211</sup> This approach is arguably not in line with modern trends and developments regarding tools for environmental management.<sup>212</sup> Modern trends tend to favour self-control, regulatory, and responsibility tools, which represent an amalgamation of various instruments.<sup>213</sup> Moreover, given the principle of subsidiarity, it is questionable why an integrated approach should be achieved by way of an authorisation. Faure and Lefevre<sup>214</sup> opine that it may have "...been preferable to prescribe an integrated approach towards the pollution problem, but then to leave freedom to the Member States to choose the legal instruments they consider most appropriate in order to effectuate this integrated approach". It may also have been preferable to formulate substantive requirements for environmental pollution as duties of care, which are addressed to polluting actors. This may provide a sounder motivation for taking responsibility, a better reference for administrative control, as well as the possibility to link the duty of care with other basic legal duties.<sup>215</sup> The question accordingly remains whether the IPPC Directive allows sufficient room for a continuously evolving and dynamic system for integrated environmental governance and management efforts.<sup>216</sup> Given the objectives of the FEAP that, *inter alia*, aims to

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<sup>210</sup> Backes *Introduction* 5 notes in this regard that the IPPC Directive may have a significant influence on British EIA and planning law since "...the data produced in this type of EIA (planning-related) do not meet the requirements of an EIA as described within the context of an IPPC permit". The main problem is attributed to the fact that the EIA data requirements are insufficiently detailed when compared to the requirements under the IPPC Directive.

<sup>211</sup> Winter *The IPPC Directive: A German Point of View* 79.

<sup>212</sup> See also paragraph 2.8 above.

<sup>213</sup> These instruments may include economic tools, public-based tools and voluntary agreements or covenants with industry. Faure and Lefevre *Integrated Pollution Prevention and Control: An Economic Appraisal* 113.

<sup>214</sup> Faure and Lefevre *Integrated Pollution Prevention and Control: An Economic Appraisal* 111.

<sup>215</sup> Winter *The IPPC Directive: a German Point of View* 66.

<sup>216</sup> It is observed in this regard that the integration movement is somewhat hampered by new developments at EU level which advocate a progressive move towards 'de-integration'. This is

broaden the range of instruments used in relation to environmental policy and action, the limited view of the IPPC Directive is surprising.<sup>217</sup>

The establishment of the IPPC Directive must however be lauded as a positive development which, through its integrated approach may result, or at the very least contribute, to a high level of environmental protection in the EU and the achievement of sustainable results. The IPPC Directive is furthermore one of the first instruments that aims to establish an integrated framework for environmental governance generally, and pollution prevention and control in particular. The value it poses for possible comparative solutions for integration efforts undertaken by other countries with fragmented environmental governance regimes, is also significant.

#### **4.13 Summary and conclusions**

##### *4.13.1 Background and historical development of the IPPC Directive*

The EU aims to address fragmentation of regulatory regimes by way of the IPPC Directive, with specific reference to those regimes pertaining to the regulation of pollution activities from the industrial sector. To address the foregoing concerns, central themes throughout the development process of the IPPC Directive focused on ideas of a one-stop shop for environmental regulation; equal treatment of environmental media in terms of similar standards and criteria; and harmonisation and integration of environmental legislation and policy principles that have been developed in a fragmented fashion over a period of time. The development of the Directive took relatively little time. This may be because of recognition of the need and urgency to integrate fragmented environmental governance efforts relating to pollution prevention and control. The development process of the Directive accordingly recognises that a fragmented approach to pollution prevention and control may not be the most viable approach to achieve sustainable results. Hence, it was realised that a more integrated and holistic approach that should ensure a high level of

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principally done by the introduction of market-based instruments such as emission trading in terms of the *Kyoto Protocol to the United Nations Framework Convention on Climate Change*, 1997 which aim to replace certain elements of the IPPC Directive. This may result in diminishing the integrated approach which is primary based on the 'command and control' approach proposed by the Directive.

<sup>217</sup> Faure and Lefevre *Integrated Pollution Prevention and Control: An Economic Appraisal* 113.

environmental protection and the achievement of sustainability, may be more beneficial.

#### *4.13.2 The rationale behind the IPPC Directive*

An integrated approach to pollution prevention and control is an important part of the move towards a more sustainable balance between human activity and socio-economic development, on the one hand, and the resources and regenerative capacity of nature, on the other. This integrated approach requires that pollution prevention and control be facilitated by viewing environmental media in an integrated fashion, since different approaches and fragmented measures to controlling emissions into the air, water or soil separately, may encourage the shifting of pollution between various environmental media, rather than protecting the environment as a whole. The main aims of the integrated approach should be the achievement of sustainable results, a high level of protection of the environment, and preventing the shifting of pollutants from one medium to another.

#### *4.13.3 The meaning of integration in terms of the IPPC Directive*

The IPPC Directive aims to give effect to an integrated approach to pollution prevention and control by way of procedural integration, organisational integration, substantive integration, and regional integration. Procedural integration relates to the procedures associated with authorisations. Procedural integration may be established through a single authorisation, a single authorisation-issuing authority, or by way of coordination and integration efforts of procedures and structures pertaining to various administrative organs involved in the authorisation process. This approach arguably describes a one-stop environmental authorisation shop.

Organisational integration refers to integration efforts relating to the administrative structures of the authorisation system. This manifestation of integration entails co-operation and coordination of administrative structures and procedures which are controlled through a central lead agent. Organisational integration has several benefits, including that it allows for a comprehensive availability of expertise pertaining to different environmental aspects, whereas this might not have been the

case with a single authority or authorisation with competence over the whole environment. A fully coordinated system may also prove to represent all environmental media more comprehensively in decision-making, by not sacrificing one medium to the benefit of another. As such, organisational integration may be the most appropriate approach for achieving the objective of an integrated approach to pollution prevention and control.

Substantive integration relates to the content of authorisations and authorisation decisions. In terms of substantive integration, authorisations should display an integrated and holistic approach to all emissions from an installation by simultaneously taking into account emissions to air, land and water. Integrated, or horizontal environmental legislation, is a prerequisite for substantive integration to be realised. Authorisations should also be based on uniform emission limit values that are founded on BAT.

The IPPC Directive may further be a useful mechanism to establish an integrated and uniform approach to pollution prevention and control at regional level. Regional integration may contribute to address issues such as transboundary pollution, and setting of uniform pollution standards throughout a region.

#### *4.13.4 Scope of application*

The IPPC Directive covers a comprehensive ambit of potential polluting sectors of industry. These sectors include energy-related industries; metal processing plants; the mineral sector; the waste management sector; pulp and paper manufacturing; the food-processing sector; and some aspects of farming and agriculture.<sup>218</sup> This wide scope aims to cover as many polluting activities from industry as possible, thereby endeavouring to ensure a high level of environmental protection. It is however noteworthy that the Directive only applies to stationary units and larger types of installations. Future developments of the Directive envisage extending the scope of

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<sup>218</sup> These sectors are also key sectors represented in South Africa and the NWP. It may accordingly be derived that some of environmental governance efforts in South Africa and the NWP, are directed at regulation of these activities. See chapter 3 above.

application also to smaller installations, thereby enhancing the application possibilities of the Directive even further.

#### *4.13.5 The basic obligations of the operator*

Operators of installations must observe and conduct their activities according to certain general principles. These general principles are principally directed at the relevant competent authority and must guide the authority during decision-making procedures. The principles include: to take all appropriate preventive measures against pollution through the application of BAT; to ensure no significant pollution is caused; to ensure waste production is avoided and where produced, waste should be recovered or disposed of in a safe way; to use energy in an efficient manner; to take the necessary measures to prevent accidents and minimise their consequences; and upon cessation of activities, to ensure that the site is in a satisfactory state so as to avoid any future pollution risks. The principles may contribute to an integrated approach by establishing a uniform practice during decision-making, as well as establishing points for consideration during the decision-making procedure. These principles must furthermore be observed by both the operator and the competent authority during the whole project life-cycle, and must guide decision-making that should ultimately be based on procedural integration.

#### *4.13.6 The IPPC Directive authorisation*

All new and existing installations should be operated with an authorisation that must be issued in terms of the IPPC Directive. An authorisation is a part, or the whole of a written decision, or series of them together, which grants authorisation to operate all or any part of an installation subject to conditions which ensure that the plant complies with the requirements of the Directive. The authorisation is the primary mechanism in terms of which the Directive's objectives must be achieved.

The IPPC Directive further establishes various conditions that must be included in an authorisation application. It also offers guidance to the competent authority on the actual granting of an authorisation. This may be viewed as an effort to achieve procedural, organisational and substantive integration, since these provisions relate to

integration of administrative processes; integration by way of uniform standards and conditions that must be contained in authorisations; and integration of conditions based on a holistic view of all environmental media.

#### *4.13.7 Best available techniques*

The IPPC Directive provides a uniform process or specification standard with regard to the use of technologies, materials and practices, in the form of BAT. BAT is a process, or specification standard, used to specify the use of, or abstention from certain technologies, materials or practices. Emission limit values, parameters or equivalent technical measures that should be included in an authorisation must be based on BAT. A uniform regional BAT standard may also contribute to promote integration at regional level. Moreover, since BAT provides a uniform standard that is applicable to all authorisations in the context of industrial emissions, procedural and substantive integration may be achieved in individual Member States.

#### *4.13.8 Changes by operators to installations*

Any change in the operations of an installation needs to be considered by the relevant competent authority. This provides for continual assessment of the industrial installation and its operations, which may require an update of authorisation conditions. These actions are linked to post-decision follow-up procedures and continual assessment efforts by both the authorisation applicant and the relevant competent authority. The reconsideration obligation is of a continual nature and may further enhance environmental protection efforts on an ongoing basis.

#### *4.13.9 Reconsideration, updating of, and compliance with authorisation conditions*

The IPPC Directive requires continual reconsideration, and updating of authorisation conditions, as well as compliance with authorisation conditions. Reconsideration must be done where pollution caused by the installation is of such significance that existing emission limit values need to be revised or new values included; where substantial changes in BAT make it possible to reduce emissions significantly without imposing excessive costs; where the operational safety of the process or activity

requires other techniques to be used; and where new legislation requires reconsideration. Reconsideration of authorisation conditions is mostly the duty of the relevant competent authority. A reciprocal obligation is however also provided for the operator of an installation, in the sense that the operator must assist the relevant competent authority in reconsideration, updating and compliance with authorisation conditions.

#### *4.13.10 Provisions on information*

Provisions on access to information are two-fold. Firstly, the IPPC Directive provides for access to information to the public during the decision-making procedure. Public involvement, input, buy-in and participation, are important components of environmental governance efforts. By including the public in decision-making procedures, a more integrated approach to environmental governance may enhance transparency and participation by recognising social factors which, in turn, are closely connected with issues of sustainability. Secondly, the Directive also provides for information exchange with regard to various pollution regulation issues between Member States. These provisions essentially relate to the exchange of information regarding national assessments of BAT and emission limit values between Member States. A formal process in the form of BREFs may facilitate this.

#### *4.13.11 The IPPC Directive and future developments*

In the IPPC Directive, a number of issues remain unclear. These issues include, *inter alia*, the relationship between the Directive and other mechanisms established under various directives; as well as the contention that the 'command and control' approach utilised by the Directive may not be in line with modern trends. Future implementation efforts and developments in scientific and academic debates may resolve some of these issues. However, for the time being, the IPPC Directive may be regarded as a positive legal development towards a more integrated approach to environmental governance in general, and pollution prevention and control in particular. The value of the Directive as a comparative framework for guiding integration efforts in other fragmented environmental governance regimes may also prove to be invaluable for the sake of future legal reforms of such regimes.

## **5. THE FINNISH APPROACH TO INTEGRATED ENVIRONMENTAL GOVERNANCE**

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## Chapter 5: The Finnish approach to integrated environmental governance<sup>1</sup>

### 5.1 Introduction

The Finnish EPA which came into force on 1 March 2000.<sup>2</sup> The enactment of the EPA was the first formal attempt by the Finnish government to comprehensively transpose the provisions of the IPPC Directive into domestic legislation.<sup>3</sup> The Finnish approach to IPPC, and industrial activities in general, is reflected in this legislation. This new approach espouses three general principles, including: participation of industry and other stakeholders in environmental target setting and preparation of new environmental legislation;<sup>4</sup> strict, but practical and cost-effective implementation of regulations, standards and authorisation provisions; as well as transparency and general access to information.<sup>5</sup> The rationale behind the aforementioned principles is to foster an integrated, informed, and participatory approach, where prevention rather than detailed enforcement, is of the essence.<sup>6</sup>

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<sup>1</sup> My sincere thanks to the following individuals for their helpful comments on an earlier version of this chapter: Professor Erkki Hollo, Faculty of Law, University of Helsinki; Marianne Lindström, Project Manager, Department of Expert Services, Finnish Environment Institute; Elise Sahivirta, Senior Environmental Officer, Finnish Ministry of Environment; Katrinna Koivisto, Senior Environmental Officer, Central Finland Regional Environment Centre, Jyväskylä; and Dr. Risto Palokangas, Director, Central Finland Regional Environment Centre, Jyväskylä. Any views and errors remain my own.

<sup>2</sup> Silvo *et al* 2002 *Resources, Conservation and Recycling* 45. The EPA, as is the case with other environmental legislation, is based on, amongst others, the *Constitution of Finland* 731 of 1999, and particularly, section 20; the environmental clause. Section 20 states that nature and its biodiversity, the environment, and the national heritage, are the responsibility of everyone. Public authorities must endeavour to guarantee everyone the right to a healthy environment, and the possibility to influence the decisions that concern their own living environment. Apparent focus is placed on the role of public authorities in both governmental and public endeavours to give effect to section 20. See for a discussion in this regard, Suksi 2002 *European Public Law* 2-7, and Vihervuori *Environmental Law in Finland* 138. Section 22 furthermore provides that public authorities, including authorities responsible for environmental administration, shall guarantee the observance of basic rights and liberties and human rights. The latter rights arguably include the right contained in section 20. With regard to governmental administration, section 119 furthermore states that the central administration of the state may consist of agencies, institutions and other bodies, that include regional and local authorities, or in the context of environmental authorities, municipal environmental authorities, regional environment centres and environmental authorisation authorities.

<sup>3</sup> See chapter 4 above for a comprehensive discussion of the IPPC Directive. See also Vihervuori 2000 *Yearbook of European Environmental Law* 478.

<sup>4</sup> It should be noted in this regard that the preparation of environmental legislation in Finland involves industry, other relevant ministries as well as all relevant stakeholders. This participatory approach allows for conflict resolution between different ministries and between industry and environmental authorities. By involving industry in the legislative preparation process, industry is afforded the opportunity and time to adequately prepare for any changes that may be required by newly prescribed authorisation provisions. Silvo *et al* 2002 *Resources, Conservation and Recycling* 51.

<sup>5</sup> Silvo *et al* 2002 *Resources, Conservation and Recycling* 45 and 51.

<sup>6</sup> Silvo *et al* 2002 *Resources, Conservation and Recycling* 45.

The overall focus of the integrated approach is to establish and further IPPC by way of, *inter alia*, an integrated authorisation system. This is evident from the rationale behind the EPA that essentially focuses, amongst others, on the principle of BAT, a holistic and integrated approach to IPPC and environmental authorisations, and a high level of sustainable environmental protection.<sup>7</sup> It is acknowledged that "...by the year 2000, the legislative and organisational hindrances to a fully integrated, BAT-based approach to environmental authorisation and enforcement were abolished",<sup>8</sup> which arguably resulted in a more integrated approach to environmental governance efforts that relate to industrial polluting activities.

It has been stated in chapter 1 above, that the integrated approach of Finland to environmental governance in general, and environmental authorisations in particular, may suggest possible solutions for the fragmented environmental governance regime in South Africa and the NWP. The following questions need to be answered in order to distil comparative solutions for the South African and NWP scenario:

1. What does the pre-2000 fragmented authorisation and governance regime entail?
2. What are the provisions of the EPA and the corresponding EPA Decree that establish an integrated authorisation system? Subsequent questions in this regard include:
  - 2.1 What are the objectives, scope and principles of the EPA?
  - 2.2 How is the current Finnish environmental governance and administration regime constituted?
  - 2.3 What do the specific environmental authorisation requirements entail?

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<sup>7</sup> Silvo *et al* 2002 *Resources, Conservation and Recycling* 45, and Vihervuori 2000 *Yearbook of European Environmental Law* 478.

<sup>8</sup> Silvo *et al* 2002 *Resources, Conservation and Recycling* 48.

- 2.4 What does the authorisation procedure entail?
- 2.5 What does the authorisation consideration procedure entail?
- 2.6 What does the authorisation decision-making procedure entail?
3. What does the computer-based VAHTI-system entail, and how does it contribute to integrated environmental governance efforts?

## **5.2 The pre-2000 fragmented environmental governance regime**

The past approach to environmental governance in Finland was characterised by fragmentation at both the policy and operational level.<sup>9</sup> Fragmentation at policy level is evident from the various sectoral acts that covered a vast amount of environmental sectors. The fragmented legislative framework included, *inter alia*, the *Water Act* 264 of 1961 (hereafter the WA); the *Air Pollution Prevention Act* 67 of 1982; the *Waste Act* 1072 of 1993; the *Health Protection Act* 763 of 1994; the *Neighbourhood Relations Act* 26 of 1920; the *Seas Protection Act* 1415 of 1994; the *Chemicals Act* 744 of 1989; the *Pesticides and Herbicides Act* 237 of 1969; the *Nature Conservation Act* 555 of 1981; the *Soil Excavation Act* 555 of 1981; the *Rapids Protection Act* 35 of 1987; the *Building and Planning Act* 370 of 1958; the *Cultural Monuments Protection Act* 60 of 1985; the *Nuclear Energy Act* 990 of 1987; and the *Mining Act* 503 of 1965.<sup>10</sup> These acts were to a large extent sector, or environmental-media specific, which resulted in a fragmented legal framework and a fragmented regulatory approach to environmental governance.<sup>11</sup>

Fragmentation at policy level resulted in fragmentation at operational level. Regulation of especially pollution activities, was, and still is to a large extent, based

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<sup>9</sup> Swanljung and Riska *Environmental Law* 195, Vihervuori *Public Environmental Law in Finland* 124, Vihervuori *Environmental Law* 183, Vihervuori 2000 *Yearbook of European Environmental Law* 477, and Vihervuori 2002 *Yearbook of European Environmental Law* 469. See also paragraph 2.3 above on fragmentation at policy and operational level.

<sup>10</sup> See Kuusiniemi *Environmental Law* 345-386 for a review of some of these acts.

<sup>11</sup> It should be noted that whilst most of these acts are still in force, at least in a substantive sense, some of the procedural provisions pertaining to environmental authorisations have been repealed and taken up in the EPA. See paragraph 5.2 below.

on an authorisation system that includes emission standards and limit values.<sup>12</sup> Various separate authorisation procedures were prescribed under these acts with no internal coordination.<sup>13</sup> In terms of pollution control, these systems included authorisation procedures for air pollution, water pollution, waste management, public health, and neighbourhood relations.<sup>14</sup> This resulted in a fragmented, discontinuous and circumstantial policy framework for environmental governance, especially insofar as environmental authorisation structures and processes are concerned.

In 1992, an attempt towards integration was made with the promulgation of the *Environmental Permit Procedure Act* 735 of 1991 (hereafter the EPPA).<sup>15</sup> The objective of the EPPA was to integrate the procedural elements of the authorisation systems of the *Air Pollution Prevention Act* 67 of 1982, the *Health Protection Act* 763 of 1994, the *Waste Act* 1072 of 1993, and the *Neighbourhood Relations Act* 26 of 1920.<sup>16</sup> The idea was that a single authorisation decision is issued that should consist of sub-authorisations with their own requirements.<sup>17</sup> These reforms were however regarded as temporary and at the time, no significant integration was achieved. A possible reason for this is that the integration reforms only focused on procedural aspects whilst excluding substantive considerations. Moreover, apart from the fact that land-use and planning was not integrated in terms of the EPPA,<sup>18</sup> protection of

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<sup>12</sup> Vihervuori *Public Environmental Law in Finland* 131, and Vihervuori *Environmental Law* 181, 188-189. Vihervuori 2000 *Yearbook of European Environmental Law* 478, however states in this regard that the Finnish authorisation system is not only a vertically applied 'command and control' tool, but also an instrument for the protection of private individuals and a framework to facilitate public participation.

<sup>13</sup> It is furthermore stated in this regard that:

Unlike most other Nordic countries, Finland has[d] no single comprehensive environmental law, but rather various individual acts and secondary regulations. The fact that each act covers only one specific field of environmental protection has resulted in considerable variations in the aims, control systems and licence procedures stipulated in the various acts.

See Swanljung and Riska *Environmental Law* 195.

<sup>14</sup> Vihervuori *Public Environmental Law in Finland* 132.

<sup>15</sup> Vihervuori 2002 *Yearbook of European Environmental Law* 469.

<sup>16</sup> Vihervuori 2000 *Yearbook of European Environmental Law* 477. See Swanljung and Riska *Environmental Law* 195-198 for a discussion of the various authorisation requirements in terms of these acts. See also Vihervuori 2002 *Yearbook of European Environmental Law* 470 for a discussion on the background and context within which the EPPA was established.

<sup>17</sup> Vihervuori *Public Environmental Law in Finland* 132. See also Vihervuori *Environmental Law* 186-187 and Swanljung and Riska *Environmental Law* 195-208, for a detailed discussion of the EPPA authorisations. Swanljung and Riska *Environmental Law* 198, state in this regard that the aim of the EPPA was to standardise the processing of authorisations, to intensify supervision, to speed up authorisation procedures, and to integrate EIA in the processing of authorisation.

<sup>18</sup> See Modeen *Planning Law in Finland* 134-151, for some historical perspectives on planning law in Finland. There is to date still no effective integration of planning aspects with environmental authorisation considerations. Although there is no formal and direct link, some planning aspects have

sectoral interests and political considerations furthermore hampered effective and comprehensive integration reforms.<sup>19</sup> Integration efforts also failed to include the vast range of authorisation procedures under the WA. Amongst various authorisations relevant to the environment, the WA also included authorisations specifically relating to environmental pollution,<sup>20</sup> which were not issued by the Regional Environmental Centres or Municipal Environmental Authorities, as is the case with the bulk of authorisations under the EPPA, but by Water Courts.<sup>21</sup> Hence, real integration in terms of administrative structures was also not achieved, because governance efforts were divided between administrative authorities and independent courts.<sup>22</sup>

The evident drawbacks of this fragmented approach necessitated more integrated and sustainable reforms. Moreover, policy-makers recognised the need to, *inter alia*: unify and further develop environmental and connected legislation; implement the provisions of the IPPC Directive; renew and streamline the authorisation and administration system; advance sustainable environmental protection and governance; control environmental effects as a whole with reference to air, land and water; promote cost-effective measures for environmental protection; and establish a 'one-authorisation-one-authority' approach.<sup>23</sup>

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been, and still are, relevant for the authorisation process, especially insofar as they relate to the interpretation of permissible norms in terms of authorisations. See in this regard Vihervuori *Environmental Law in Finland* 152-153.

<sup>19</sup> Vihervuori *Public Environmental Law in Finland* 132-133. It is also stated in this regard that the main reason for the persistence of fragmentation in the past, may be attributed to political controversy of whether water pollution prevention should be part of traditional water law, instead of general environmental law. See in this regard Vihervuori *Environmental Law in Finland* 139.

<sup>20</sup> Chapter 10 of the WA. See also Swanljung and Riska *Environmental Law* 197, for a discussion of the authorisation requirements in terms of the WA.

<sup>21</sup> Water Courts consisted of legal, technical and ecological experts and mainly dealt with matters relating to water resources, water management, construction in water areas, drainage, and water pollution. Apart from the foregoing, Water Courts also dealt with matters relating to private law suites, criminal cases, authorisation enforcement and administrative appeals. See further Vihervuori *Environmental Law* 179-180.

<sup>22</sup> Vihervuori *Environmental Law in Finland* 150.

<sup>23</sup> Interview Hollo E, Professor of Law, University of Helsinki, and Interview Sahivirta E, Senior Environmental Law Officer, Finnish Ministry of Environment.

### 5.3 Relevant provisions of the EPA and the EPA Decree

#### 5.3.1 Contextual background

It was only with the introduction of the EPA in 2000, that comprehensive integration of procedural and substantive elements of the fragmented approach was achieved for industrial activities.<sup>24</sup> The EPA and its accompanying *Environmental Protection Act Decree* 169 of 2000 (hereafter the EPA Decree),<sup>25</sup> incorporate all the basic requirements and provisions of the IPPC Directive, and may be seen as a single codification act that essentially aims to reform decision-making mechanisms in the Finnish environmental governance sphere.<sup>26</sup> The legislative reform brought about by the introduction of the EPA was very extensive and particularly difficult to attain. According to article 7 of the IPPC Directive, a shared competence may have been maintained between the courts and the environmental authorities if all integration and coordination requirements were observed and met.<sup>27</sup> Reforms, however, involved an infringement of the *status quo* of both the judiciary in the form of the previous Water Courts, and the environmental administration in the form of the previous environmental governance structures. Reforms accordingly included an amendment of substantive environmental law in the form of legislation, abolition of a category of the judiciary, and the creation of a completely new sector in environmental administration and governance.

In the foregoing context, the EPA led to the repeal of the EPPA, the *Noise Abatement Act* 382 of 1987, and the *Air Pollution Prevention Act* 67 of 1982.<sup>28</sup> All the

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<sup>24</sup> Vihervuori *Environmental Law* 183.

<sup>25</sup> Whilst environmental acts are promulgated by parliament, complementary decrees, such as the EPA Decree, are issued by the President, and essentially contain minor or technical detail with regard to the main act. See in this regard Vihervuori *Environmental Law* 183. Chapter 2 of the EPA deals extensively with decrees and regulations that may be stipulated in terms of the act. Decrees and regulations may be established for matters including: environmental quality and emissions; certain specific activities; motor vehicles, machinery and equipment; soil; substances, preparations and products; exceptions; household sewage; and municipal environmental protection regulations.

<sup>26</sup> Vihervuori *Environmental Law* 191. The EPA Decree contains, *inter alia*, lists of activities and installations, specific provisions on authorisations, competencies of the various authorisation authorities, and obligations with regard to existing activities. See Vihervuori *Environmental Law in Finland* 139.

<sup>27</sup> See chapter 4 above for a comprehensive discussion.

<sup>28</sup> Vihervuori 2002 *Yearbook of European Environmental Law* 470.

provisions of the WA on water pollution were repealed and integrated in the EPA.<sup>29</sup> In terms of the *Health Protection Act* 763 of 1994, relevant provisions pertaining to authorisation for localisation were incorporated in the EPA. With regard to the *Waste Act* 1072 of 1993, the WA, and the *Neighbourhood Relations Act* 26 of 1920, all provisions pertaining to authorisations for polluted areas and emissions were also repealed and incorporated in the EPA. The EPA furthermore established a system of more integrated and structured permit authorities that is currently divided into three levels, namely Municipal Environmental Authorities,<sup>30</sup> Regional Environmental Centres,<sup>31</sup> and Environmental Permit Authorities.<sup>32</sup>

The EPA is currently the basic statute for regulating environmental pollution in Finland.<sup>33</sup> Its primary objective is to prevent pollution to air, soil and water in a holistic and integrated fashion, by integrating authorisation decision-making mandates, procedures and structures.<sup>34</sup> The EPA is based on the concept of IPPC as it is embodied in the IPPC Directive, and it is envisaged that the integrated environmental governance effort proposed by the EPA may contribute to a more streamlined, cost-effective and timeous procedure for the issuance of environmental authorisations in Finland.<sup>35</sup> It is stated in this regard that "...the new legislation [the EPA] clearly represents more than just the sum of the present sectoral provisions".<sup>36</sup> Whilst the EPA does integrate some of the provisions of sectoral acts, its primary objective is to create a uniform substantive and procedural legal regime for the integrated regulation of environmental pollution.<sup>37</sup>

The regulatory approach of the EPA makes extensive use of authorisations.<sup>38</sup> Whereas the prescribed authorisation system provides mandatory requirements for an operator to conduct its activities, it also serves as a framework that allows the operator

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<sup>29</sup> Swanljung and Riska *Environmental Law* 199.

<sup>30</sup> There are currently 448 municipal environmental authorities in Finland. See further Vihervuori *Environmental Law* 177-178.

<sup>31</sup> The number of regional environmental centres is currently 13. See further Vihervuori *Environmental Law* 177-178.

<sup>32</sup> There are 3 environmental authorisation authorities established to date in Finland. See Swanljung and Riska *Environmental Law* 199-200, and paragraph 5.3.3 below for a detailed discussion.

<sup>33</sup> Vihervuori 2000 *Yearbook of International Environmental Law* 388.

<sup>34</sup> Vihervuori 2003 *Yearbook of European Environmental Law* 591.

<sup>35</sup> Vihervuori 2000 *Yearbook of International Environmental Law* 388.

<sup>36</sup> Vihervuori 2000 *Yearbook of European Environmental Law* 477.

<sup>37</sup> Vihervuori 2000 *Yearbook of European Environmental Law* 478.

<sup>38</sup> See paragraph 2.8 above for a discussion on authorisations.

to exercise self-regulation to some extent.<sup>39</sup> Self-regulation is accordingly allowed, provided that it is executed within clearly defined limits set out by authorisations.<sup>40</sup> It is noteworthy that the EPA is essentially based on a 'command and control' approach, where the authorisation system "...serves certain crucial functions in environmental regulation that cannot be substituted by other means".<sup>41</sup> The main reasons behind the strong focus on a 'command and control' approach may be attributed to the apparent benefits it provides. These include: that authorisations may be used to implement international, regional and national environmental policies and targets (such as those provided by the IPPC Directive); that authorisations may serve as effective instruments which take into account specific local environmental features; and that authorisations may be utilised to facilitate public participation, access to information, appeals and indemnities.<sup>42</sup> Although the strong emphasis on a 'command and control' approach is questioned in the wake of European developments to the contrary, it is generally accepted that the high level of environmental protection in Finland may largely be attributed to the strict implementation of this approach.<sup>43</sup>

The EPA contains, *inter alia*, general principles, obligations, and prohibitions; a delegation of normative competencies; rules on environmental authorisations; notification procedures; provisions on compensation; regulations on remedying the effects of pollution; surveillance measures; administrative sanctions; and the right to appeal. Subsequent paragraphs discuss the most relevant provisions of the act and its accompanying decree that may suggest possible solutions for the establishment of an integrated environmental governance effort in South Africa and the NWP.

### 5.3.2 *Objectives, scope and principles of the EPA*

Sections 1(1)-1(7) of the EPA set out the objectives of the Act. These objectives include: to prevent environmental pollution and repair and reduce pollution damage;

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<sup>39</sup> Silvo *et al* 2002 *Resources, Conservation and Recycling* 49.

<sup>40</sup> Self-regulation allows the operator of an industrial installation to choose the techniques and other methods by which to reach the objectives of the EPA. The rationale behind self-regulation is to provide the necessary flexibility to introduce and further develop the most appropriate and cost-effective environmental measures. Silvo *et al* 2002 *Resources, Conservation and Recycling* 50.

<sup>41</sup> Silvo *et al* 2002 *Resources, Conservation and Recycling* 49.

<sup>42</sup> Silvo *et al* 2002 *Resources, Conservation and Recycling* 49.

<sup>43</sup> Silvo *et al* 2002 *Resources, Conservation and Recycling* 49. See also paragraph 2.8 above for a discussion on criticism raised against the use of 'command and control' tools.



to safeguard a healthy, pleasant, ecologically diverse and sustainable environment; to prevent waste generation and harmful effects of waste; to improve and integrate the assessment of polluting activities; to promote sustainable use of natural resources; and to combat climate change and support sustainable development. The scope and aim of the EPA are based on some general principles which include: prevention of negative impacts and reducing harm, precaution and care, BAT, best environmental practices, and the polluter-pays principle.<sup>44</sup>

The objectives of the EPA, together with all the provisions contained therein, are applicable to all activities that lead, or may lead to environmental pollution.<sup>45</sup> 'Environmental pollution' is comprehensively defined as emissions or deposits of a substance, energy, noise, vibration, radiation, light, heat or odour caused by human activities in the environment.<sup>46</sup> This definition includes: sanitary nuisance, harm to nature or its functions, hindrance or significant inconvenience to the use of natural resources, deterioration of the general amenity of the environment or of specific cultural values, reduction of the suitability of the environment for the public, damage or harm to another's property or its use, and other comparable violations of the public or private interest that are caused or may be caused by a discharge or emission.<sup>47</sup> The provisions of the act, and hence, the integrated authorisation system, are applicable to the wood-processing industry; the metal industry; energy production; the chemical industry; storage, use or disposal of chemicals and fuels; activities involving the use of volatile organic compounds; excavation of ores or minerals, and extraction of geological materials; manufacture of mineral products; industrial production and handling of leather or textiles; preparation of foodstuffs and animal feed; livestock shelters and fish farms; transport; and waste and water management.<sup>48</sup> It may be

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<sup>44</sup> Section 4, Vihervuori 2002 *Yearbook of European Environmental Law* 471, and Vihervuori *Environmental Law in Finland* 147. Sections 5-9 contain further provisions on, *inter alia*: general duties of operators, by stating that operators must have sufficient knowledge of their activities' environmental impact and risks and of ways to reduce harmful effects; selection of the best location for an installation; soil pollution prohibition; groundwater pollution prohibition; and specific prohibitions pertaining to the Finnish seas. See also Vihervuori 2002 *Yearbook of European Environmental Law* 471.

<sup>45</sup> Section 2. Vihervuori 2002 *Yearbook of European Environmental Law* 471, states that when considering the broad definition of 'pollution', it is evident that the scope of application of the EPA is very comprehensive. There are however certain general exclusions to which the EPA is not applicable, such as discharges caused by the normal use of vessels.

<sup>46</sup> Section 3(1).

<sup>47</sup> Vihervuori *Environmental Law in Finland* 139.

<sup>48</sup> Section 1 of the EPA Decree, and Vihervuori 2002 *Yearbook of European Environmental Law* 471.

derived from the foregoing that the scope of application of the EPA is very comprehensive and results in an even broader scope of activities and installations requiring authorisations when compared to the IPPC Directive.<sup>49</sup>

### 5.3.3 *The integrated environmental administration regime*

Integration efforts under the EPA also transformed the fragmented environmental governance and administration regime in Finland.<sup>50</sup> The EPA created a three-tiered administrative system for the regulation of environmental authorisations.<sup>51</sup> The division of the authorities is based on the type and size of activity for which authorisation is sought.<sup>52</sup> The first important factor in this regard, was the abolition of the Water Courts that handled authorisations in terms of the WA. In the place of the Water Courts, three Environmental Permit Authorities were established.<sup>53</sup> The Environmental Permit Authorities deal with authorisation applications concerning the most important activities and installations in terms of the EPA.<sup>54</sup> According to

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<sup>49</sup> See chapter 3 above, and Vihervuori 2003 *Yearbook of European Environmental Law* 591.

<sup>50</sup> See Vihervuori *Environmental Law in Finland* 133, and paragraph 5.2 above, for a historical background on the Finnish environmental administration. It should also be noted that whilst the EPA provides for a comprehensively integrated authorisation system with regard to activities that may cause pollution, there are still other authorities that may be involved in the environmental governance effort. Whereas Environmental Permit Authorities, Regional Environment Centres and Municipal Environmental Authorities have exclusive competence with regard to emission issues, building authorities may, for example, also be involved insofar as they must prescribe conditions relating to the environmental impact of building activities.

<sup>51</sup> Environmental Permit Authorities deal with issues at IPPC or EIA level, or in other words, the most comprehensive projects, installations and activities that may cause significant harm to the environment. 'Middle class' issues are dealt with by Regional Environment Centres, and all remaining, or less significant issues, are considered by Municipal Environmental Authorities. See in this regard Vihervuori 2002 *Yearbook of European Environmental Law* 478. It is further important to note that the environmental administration also operates under the ambit of the newly promulgated *Administrative Procedure Act* 434 of 2003. The provisions of this act are complemented by the provisions of the WA and the EPA. See Niemivuo 2004 *European Public Law* 461-468, for a detailed discussion.

<sup>52</sup> Silvo *et al* 2002 *Resources, Conservation and Recycling* 48, and Vihervuori *Environmental Law in Finland* 151.

<sup>53</sup> The three Environmental Permit Authorities that replaced the former Water Courts are based in Helsinki, Kuopio and Oulu. The Permit Authorities in many respects resemble the previous Water Courts. See Vihervuori 2002 *Yearbook of European Environmental Law* 478. It should be noted that in terms of the WA, the Environmental Permit Authorities also deal with, *inter alia*, construction in water bodies, hydroelectric plants, water regulation, water abstraction, embankment, and timber floating. See in this regard Vihervuori 2000 *Yearbook of European Environmental Law* 479.

<sup>54</sup> Section 23, and Vihervuori 2000 *Yearbook of European Environmental Law* 479. Environmental Permit Authorities are of an administrative nature, although 'court-like' in a sense. They have an independent position and competence in certain authorisation and coercion procedures in terms of the WA and the EPA. Unlike the Regional Environment Centres and the Municipal Environmental Authorities, these authorities have no additional tasks. See further Vihervuori *Environmental Law in Finland* 134.

section 5 of the EPA Decree, these activities include large-scale activities which may have a significant detrimental impact on the environment.<sup>55</sup>

Regional Environment Centres<sup>56</sup> and Municipal Environmental Authorities<sup>57</sup> also serve as authorisation authorities for the remainder of issues not dealt with by Environmental Permit Authorities. A vast number of issues are detailed in the EPA Decree in this regard and include, amongst others: wood impregnation plants; rolling, or hammer mills for ferrous metals; shipyards; smaller power stations; chemical plants producing inorganic chemicals; factories producing explosives; cement or lime works; brickworks; sugar refineries; dairies; breweries; fur farms; composting facilities; raw water treatment plants;<sup>58</sup> small sawmills; lubricating oil facilities; coal stores; stone quarries; ceramic or porcelain factories; feed mixing plants; coffee roasteries; zoological gardens; and crematoria.<sup>59</sup>

Chapter 3 of the EPA specifically deals with environmental authorities and their duties. It is provided that the current administration falls under the auspices of the Ministry of the Environment which is responsible for general steering, surveillance and development of all matters arising from the EPA.<sup>60</sup> Apart from the issuance of authorisations, some authorisation authorities are, in addition, responsible for

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<sup>55</sup> These activities include, *inter alia*, pulp, paper, or board mills; ore roasting plants; ironworks and metal works; nuclear power stations; electric power station; oil and gas refineries; mining; peat production; plants handling asbestos; harbours intended for merchant shipping; airports; municipal waste treatment plants; and oil or gas exploration and drilling. Section 5 of the EPA Decree.

<sup>56</sup> Regional Environment Centres include: Uusimaa Regional Environment Centre in Helsinki, Southwest Finland Regional Environment Centre in Turku, Häme Regional Environment Centre in Hämeenlinna, Pirkanmaa Regional Environment Centre in Tampere, Southeast Finland Regional Environment Centre in Kouvola, South Savo Regional Environment Centre in Mikkeli, North Savo Regional Environment Centre in Kuopio, North Karelia Regional Environment Centre in Joensuu, Central Finland Regional Environment Centre in Jyväskylä, West Finland Regional Environment Centre in Vaasa, North Ostrobothnia Regional Environment Centre in Oulu, Kainuu Regional Environment Centre in Kajaani, and Lapland Regional Environment Centre in Rovaniemi.

<sup>57</sup> Municipal Environmental Authorities are an important part of the public administration system in Finland, with extensive powers, when compared to the rest of local government authorities in Europe. Municipalities are mainly responsible for issuing of authorisations with regard to small industries, as well as some issues pertaining to land-use and zoning. See further in this regard, Vihervuori *Environmental law in Finland* 132-133.

<sup>58</sup> Section 6 of the EPA Decree states that Regional Environment Centres are responsible for these activities.

<sup>59</sup> These activities will be the responsibility of the Municipal Environmental Authority. Section 7 of the EPA Decree.

<sup>60</sup> Sections 20, 21 and 22. It should however be noted that Regional Environment Centres are also answerable to the Ministry of Agriculture and Forestry insofar as water management issues are concerned. See Vihervuori *Environmental Law in Finland* 131-132.

monitoring the state of the environment,<sup>61</sup> and maintaining an environmental protection database.<sup>62</sup>

Chapter 5 of the EPA further provides for the jurisdictional competence of authorisation authorities. Environmental Permit Authorities may deal with authorisation issues when the activity may have a substantial environmental impact, where the activity, in addition, requires an authorisation in terms of the WA, and where the applicant is a Regional Environment Centre.<sup>63</sup> Regional Environment Centres are responsible for processing of authorisations where, *inter alia*, the environmental impact of the activity concerns an area substantially wider than that of the municipality where the activity is located, as well as where an authorisation is warranted under section 28 and 29 of the EPA.<sup>64</sup> For an authorisation for the alteration of an activity, the responsible authority will be the one under whose competence the processing of applications for corresponding new activities would fall.<sup>65</sup> Where it becomes evident that an activity may pollute a water body, or where special expertise is required and it is not available locally, a Municipal Environmental Authority must refer the matter to the relevant Regional Environment Centre.<sup>66</sup> With regard to territorial jurisdiction, section 34 states that authorisation applications are processed by the authority within whose territory the activity concerned is to be situated. Where territories of several authorities are involved, the competent authority is the one in whose territory the main part of the activity is to be located.<sup>67</sup>

Regional Environment Centres, Environmental Permit Authorities and Municipal Environmental Authorities, to a lesser extent, consist of a highly skilled team of experts drawn from a multi-disciplinary field. The typical composition of a authorisation panel responsible for the issuance of an authorisation, is constituted on the basis of the nature of the authorisation and may include: lawyers; hydraulic,

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<sup>61</sup> Section 25.

<sup>62</sup> Section 27.

<sup>63</sup> Section 31(1)-31(3).

<sup>64</sup> Environment Permit Authorities and the Regional Environmental Centres regulate most of the activities stipulated in the IPPC Directive. Vihervuori *Environmental Law in Finland* 151.

<sup>65</sup> Section 32.

<sup>66</sup> Section 33.

<sup>67</sup> Section 34.

sanitary and chemistry engineers; biologists; experts in water affairs, air pollution, noise pollution, waste control, and environmental law; as well as support personnel.<sup>68</sup>

In addition to the authorisation authorities, the Finnish Environment Institute (hereafter SYKE) has been established and acts as a research and development centre, responsible to, *inter alia*, conduct research in support of authorisation authorities' administrative functions, as well as to render support to industrial operators.<sup>69</sup> Apart from research and development services, SYKE furthermore acts as an information centre to provide support for the achievement of ecologically sustainable development.<sup>70</sup> Together with the research of SYKE, the Ministry of the Environment has established a BAT Network that involves authorisation authorities, enforcement authorities and representatives of industry. The BAT Network aims to enhance the implementation of the IPPC Directive's provisions, by promoting innovative pollution prevention and control techniques; enhancing the availability of information on authorisation requirements; and furthering the utilisation of the most effective methods to address IPPC.<sup>71</sup>

Section 24 of the EPA further states in this regard that other state authorities and research institutions may function as expert authorities during the course of the authorisation process. The role of these authorities and institutions is to provide expert advice to other authorities and conduct necessary research that may assist authorities in their environmental governance tasks, including environmental authorisations.<sup>72</sup> The expert authorities and institutions include: the Ministry of Agriculture and Forestry, the Ministry of Social Affairs and Health, the Finnish Forest Research Institute, the Agricultural Research Centre, the Finnish Game and Fisheries Research Institute, the National Veterinary and Food Research Institute, the Finnish Meteorological Institute, the Institute of Marine Research, the Technical Research

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<sup>68</sup> Interview Kovanen T, Environmental Counsellor, Western Finland Environmental Permit Authority.

<sup>69</sup> Section 32 and 33 of the EPA Decree. See also Silvo *et al* 2002 *Resources, Conservation and Recycling* 48, and Vihervuori *Environmental Law in Finland* 131.

<sup>70</sup> Interview Lindstrom M, Project Manager, Department of Expert Services, Finnish Environment Institute.

<sup>71</sup> Silvo *et al* 2002 *Resources, Conservation and Recycling* 52.

<sup>72</sup> Section 24 of the EPA.

Centre of Finland, the Geological Survey of Finland, and the National Public Health Institute.<sup>73</sup>

#### 5.3.4 *Environmental authorisation requirements*

Section 28 of the EPA states that an authorisation is required for activities which threaten to pollute the environment.<sup>74</sup> This include an authorisation for activities which may cause pollution of a water body; activities involving wastewater; activities which may place an unreasonable burden on surroundings; institutional or commercial recovery; and disposal of waste and test drilling for oil or gas in Finnish territorial waters.<sup>75</sup> According to section 28, an authorisation is also required for any alteration of an activity that increases emissions or the effect thereof for which an authorisation has already been granted. An authorisation may be required for emissions into waters, a public sewer or the ocean irrespective of the fact that it may cause pollution or not.<sup>76</sup> It is however noted that an authorisation is not required for some short-term activities undertaken on an experimental basis, such as the testing of a raw material for fuel.<sup>77</sup> Section 1 of the EPA Decree specifically states that an authorisation is required for certain activities in respect of the following sectors: wood-processing; the metal industry; energy production; the chemical industry; storage, use, or disposal of chemicals or fuels; work involving the use of volatile organic compounds; excavation of ores, or minerals, or extraction of geological materials; manufacture of mineral products; industrial production or handling of leather or textiles; preparation of foodstuffs or animal feeds; livestock shelters or fish farms; transport; waste and water management; and other activities including shooting ranges, industrial sandblasting; zoological gardens; and crematoria.<sup>78</sup>

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<sup>73</sup> Section 32 of the EPA Decree.

<sup>74</sup> Vihervuori 2002 *Yearbook of European Environmental Law* 473.

<sup>75</sup> Sections 28(1)-28(5).

<sup>76</sup> Section 29. This provision is supported by section 3 of the EPA Decree that states that activities are considered to cause a discharge, unless it is clear that their discharge poses no danger of contamination to the waters.

<sup>77</sup> Section 30. An authorisation is furthermore not required if the activity relates to: the recovery or disposal in agricultural and forestry operations of natural, non-hazardous waste; activities that relate to non-hazardous soil or rock waste; the recovery of treated, non-hazardous sludge from, *inter alia*, wastewater and septic tanks; and temporary aerodromes, harbours, storage facilities, fuel distribution points, firing ranges, or other comparable activities of the Defence Force. Section 4 of the EPA Decree.

<sup>78</sup> Section 1 of the EPA Decree. The activities referred to in section 1 of the EPA Decree must be understood to include primary activities plus supplementary support activities, insofar as these

Regard existing activities, and based on authorisation requirements in terms of previous sectoral legislation, a new integrated authorisation may also be required as specified in the EPA Decree,<sup>79</sup> or when required by the IPPC Directive, or for any activities relating to air pollution.<sup>80</sup> However, as a general rule, if any essential change is made to a previously authorised activity, a new integrated authorisation will be required.<sup>81</sup>

### 5.3.5 *The authorisation application procedure*

Chapter 6 of the EPA deals with the authorisation application procedure. Authorisation applications must be submitted to the relevant competent authority.<sup>82</sup> All authorisation applications to the competent authority are deemed to have become pending when the application is submitted.<sup>83</sup> All applications must include a report on the activity, its impacts, information of all parties involved, as well as any additional information required under the EPA Decree.<sup>84</sup> If the activity requires an EIA, the latter must be included in the application. It is required that an authorisation applicant must provide three copies of the application plus all relevant attachments.<sup>85</sup> The relevant authority may require further copies. The application must also indicate, where relevant, the material and methods of calculation, research and evaluation on which the information it provides is based.<sup>86</sup> It is additionally required by section 8 of the EPA Decree that the person drafting the application, must possess adequate specialist knowledge of the subject.

All authorisation applications must include, *inter alia*: the name and contact details of the applicant; details of the installation; a general description of the activities concerned; information on output, processes, equipment and structures; information

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activities for a technically and productively integrated operational unit whose environmental impacts or waste management require to be examined together. Section 2 of the EPA Decree.

<sup>79</sup> Sections 41-43 of the EPA Decree.

<sup>80</sup> Vihervuori 2002 *Yearbook of European Environmental Law* 473.

<sup>81</sup> Vihervuori 2002 *Yearbook of European Environmental Law* 473.

<sup>82</sup> Section 35. If the application is not submitted to the correct authority the authority must, without delay, transfer the application to the authority it deems to be the relevant competent authority. See in this regard section 21 of the *Administrative Procedure Act* 434 of 2003.

<sup>83</sup> Section 35.

<sup>84</sup> Section 35.

<sup>85</sup> Section 8 of the EPA Decree.

<sup>86</sup> Section 8 of the EPA Decree.

on location of activities and local environmental conditions; information on the quality and quantity of discharges; information on the types, quantities, and properties of waste; an EIA where applicable; date for commencement of activities; an account of immediate neighbours; information on the quality of the environment; information on the proposed use of raw materials and energy-use; a risk assessment; information on types and sources of discharges and noise levels; an assessment of the application of BAT;<sup>87</sup> an account of the proposed action to reduce and clean up discharges; details on water procurement and disposal; details of transport arrangements; an account of methods to reduce and recover waste; and information on environmental management systems to be implemented by the installation.<sup>88</sup> Certain additional information must accompany the authorisation application. This information includes: other authorisations granted relating to sewers; a map of the activities, sources of discharge and other facilities; a site map; a process chart setting out significant sources of discharge; an extensive account to facilitate assessment of the potential risk of a major accident; a proposal on how monitoring is to be facilitated; an assessment in terms of the *Environmental Impact Assessment Procedure Act* 468 of 1994 and an assessment in terms of section 65 of the *Nature Conservation Act* 1996 of 1996;<sup>89</sup> additional information relating to discharges into water;<sup>90</sup> additional information on water and waste management;<sup>91</sup> and additional information on groundwater basins.<sup>92</sup> The EPA Decree also details requirements pertaining to applications for change of use,<sup>93</sup> for review of an authorisation decision, and renewal of a temporary authorisation.<sup>94</sup>

Opinions on the application may be required from the Regional Environment Centre and the Municipal Environmental Authority, as well as all other relevant authorities which may be affected by an environmental impact of the activity.<sup>95</sup> This provision is arguably meant to establish a procedure of rapport-building, coordination and

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<sup>87</sup> Section 37 of the EPA Decree specifically deals with the factors that must be taken into account when assessing BAT.

<sup>88</sup> Section 9 of the EPA Decree.

<sup>89</sup> Section 10 of the EPA Decree.

<sup>90</sup> Section 11 of the EPA Decree.

<sup>91</sup> Section 12 of the EPA Decree.

<sup>92</sup> Section 13 of the EPA Decree.

<sup>93</sup> Section 14 of the EPA Decree.

<sup>94</sup> Section 15 of the EPA Decree.

<sup>95</sup> Section 36. Section 17 of the EPA Decree requires that where necessary, the relevant authorisation authority must arrange a meeting with all stakeholders to raise opinions and objection. These stakeholders include other relevant authorisation authorities and ministries such as the Ministry of Transport and Communication, and the Ministry of Social Affairs and Health.



consultation between the different authorities where the environmental impact may be relevant for the jurisdiction of other authorisation authorities. Section 17 of the EPA Decree further provides in this regard that when processing the authorisation application, the authorisation authority must maintain all necessary contacts with other authorities who are simultaneously processing other authorisation applications and plans bearing on the same activities. When the eventual authorisation decision has been issued, it is also required that the relevant authorisation authority must forward a copy of the authorisation decision to all those authorities from whom it requested an initial opinion on the authorisation application.<sup>96</sup>

Before passing a decision on an application, the application must be published and all relevant stakeholders must be given the opportunity to lodge complaints.<sup>97</sup> An application for an activity concerning water pollution and pollution activities under the WA, must be jointly lodged and processed, considered, and included in a single decision.<sup>98</sup> It is furthermore provided in this context, that applications for different activities must be considered and processed simultaneously, unless this is deemed unnecessary for a special reason.<sup>99</sup>

#### *5.3.6 Authorisation consideration procedures*

Authorisations will only be granted for activities that meet the requirements of the EPA, the *Waste Act* 1072 of 1993, and relevant decrees issued in terms of these acts.<sup>100</sup> No authorisations may be granted where, amongst others, the activity may result in harm to health, significant environmental pollution or the risk thereof, and deterioration of special natural conditions or risk to water supply, and unreasonable nuisance.<sup>101</sup> All authorisations must contain necessary regulations, or conditions regarding: emissions; waste and reduction of their generation and harmfulness; measures to be taken after discontinuing activities; measures on prevention, reduction

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<sup>96</sup> Section 23 of the EPA Decree.

<sup>97</sup> Sections 37 and 38.

<sup>98</sup> Section 39.

<sup>99</sup> Section 40.

<sup>100</sup> The authorisation authority must furthermore inspect the opinions issued, and complaints made, in the matter and the preconditions for granting the authorisation. The authorisation authority must also take into account relevant legislative provisions on the protection of public and private goods. See section 41, and Vihervuori 2002 *Yearbook of European Environmental Law* 475.

<sup>101</sup> Section 42, and Vihervuori 2002 *Yearbook of European Environmental Law* 474.

or evaluation of pollution; regulations pertaining to fisheries, waste and waste management; monitoring; and emissions into a sewer and outlet pipes.<sup>102</sup>

When authorisation regulations are issued, the nature of the activity, the properties of the area where the impact of the activity shows, the impact of the activity on the environment as a whole, the significance of measures intended to prevent pollution of the environment as a whole, and the technical and financial feasibility of these actions must be taken into account.<sup>103</sup> Authorisation regulations concerning the prevention and limitation of emissions must be based on BAT.<sup>104</sup> Energy efficiency and precautions, prevention of accidents and limiting their consequences, must also be taken into account.<sup>105</sup>

Section 46 provides for monitoring regulations. It is specifically provided in this regard, that operative monitoring of the activity and monitoring of emissions, waste and waste management, the impact of the activity and monitoring of the state of the environment following the discontinuation of the activity, must be issued in the authorisation. In addition, the operator may be ordered to provide information necessary for monitoring. To streamline the monitoring process, it is provided that the authorisation authority may order several authorisation holders to jointly monitor the impact of their activities.<sup>106</sup> According to section 46, the operator may furthermore be required to provide the relevant authorisation authority with a monitoring plan in sufficient time, so that monitoring may be initiated when the activity begins, or at some other time which is appropriate in relation to the impact of the activity. With regard to monitoring requirements, there rests a reciprocal duty on the relevant authorisation authority that issued the authorisation. Section 29 of the EPA Decree states in this regard that the authority must carry out inspections of activities that have been authorised as often as is necessary in order to monitor

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<sup>102</sup> Sections 43-49, and Vihervuori 2002 *Yearbook of European Environmental Law* 475. An authorisation regulation may be stricter than a specific environmental protection requirement included in a decree issued under the EPA or *Waste Act* 1072 of 1993 for the purpose of meeting the preconditions for granting a authorisation; to ensure that environmental quality requirements issued by decree are met; or to protect water resources. Section 51.

<sup>103</sup> Section 43.

<sup>104</sup> Section 43.

<sup>105</sup> Section 43. Sections 44 and 45 provide for specific regulations in terms of fisheries and waste and waste management. Sections 47 and 48 deal with regulation pertaining to sewers, whilst section 49 specifically provides for regulations pertaining to outlet pipes.

<sup>106</sup> Section 46.

operations. Specific provision is made for co-operative measures in the case where inspections need to be carried out by more than one authority.<sup>107</sup>

### 5.3.7 *The authorisation decision*

Depending on the nature of the application, authorisations are either issued until further notice, for a fixed period of time, or by the date indicated in the notice placed on the notice board of the relevant authority.<sup>108</sup> Grounds and jurisdiction for the decision must also be indicated in the decision.

When the *Environmental Impact Assessment Procedure* 468 of 1994 is applicable to a project, the authorisation decision must indicate how the assessment has been taken into account in the authorisation consideration.<sup>109</sup> The more formal points of procedure in the EIA process are in most instances linked with the authorisation procedure of the relevant authorisation authorities.<sup>110</sup> In most instances, the authorisation application documents already contain a completed EIA statement and it is further required of authorisation authorities to indicate in the authorisation decision how the EIA has been taken into account during decision-making.<sup>111</sup>

The authorisation decision must be delivered to all relevant stakeholders and a notice of the decision must be published in the municipality where the activity is located, and in other municipalities where the activity may have an impact.<sup>112</sup> Decisions of all authorities acting within the ambit of the EPA may be appealed to the Vaasa Administrative Court and the Supreme Administrative Court.<sup>113</sup>

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<sup>107</sup> Section 29 of the EPA Decree. Section 30 of the EPA Decree is arguably meant to assist relevant authorities in their inspection tasks. It provides that the operator shall notify the authority which has served as the authorisation authority of any operational changes, or any events that have taken place which are not a normal part of the activities covered by the authorisation.

<sup>108</sup> Sections 52-53.

<sup>109</sup> Section 52. See further on the relationship between the EIA process and environmental authorisations, Vihervuori *Environmental Law in Finland* 155-156.

<sup>110</sup> Vihervuori *Environmental Law in Finland* 156.

<sup>111</sup> Vihervuori *Environmental Law in Finland* 156.

<sup>112</sup> Section 54. Section 16 of the EPA Decree furthermore provides for detailed arrangements with regard to the publication of authorisation applications and display of documents for public inspection.

<sup>113</sup> Chapter 14 of the EPA, Vihervuori 2002 *Yearbook of European Environmental Law* 478-479, Vihervuori *Environmental Law in Finland* 134-137, and Niemivuo 2004 *European Public Law* 461-468, on some general perspectives pertaining to administrative procedures in Finland.

Section 18 of the EPA Decree details the specific information which must be contained in the recital section of the authorisation decision. This information includes: the name and contact details of the applicant; the grounds of the authorisation application; commencement of processing the application; an account of existing authorisations; information on the condition and quality of the environment; a description of, and key information on the activities and their extent; details of provision for monitoring; details of waste and other discharges; details of environmental impacts; details of proposed environmental protection measures and recovery and disposal of waste; details of proposed risk assessment and accident prevention measures; information on processing of the application; official opinions, objections and opinions from interested parties, responses and their content; and details of any inspections that have been carried out. The decision section of the authorisation must contain: the final decision and how any requirements, statements and EIAs have been taken into account; the conditions of the authorisation; provisions regulating discharges; provisions governing measures to prevent environmental pollution, provisions relating to monitoring; provisions relating to compensation for loss or damage; the validity and review of the authorisation and the terms thereof; the processing fee; a statement of reasons for the decision; a statement of how environmental management systems and measures for energy saving have been taken into account; and any order for the enforcement of the authorisation decision.<sup>114</sup>

An authorisation granted for a fixed period expires when the period lapses unless otherwise stipulated.<sup>115</sup> It may also be decided by the issuing authority that an authorisation expires when the activity has been suspended for five consecutive years, when the activity has not been started within five years, or when an application for review has not been made.<sup>116</sup> An authorisation may be amended if pollution or risk of pollution is materially different than was expected, the activity has a consequence prohibited by the EPA, emissions may be reduced significantly by way of new BAT applications, circumstances have changed substantially since the issuance of the

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<sup>114</sup> Section 19 of the EPA Decree. Further provisions of the EPA Decree also deal in detail with terms that must be included in authorisation decisions for landfill sites; authorisation decisions that deal with a change in use; and authorisation decisions dealing with review of an authorisation. See in this regard sections 20-22 of the EPA Decree.

<sup>115</sup> Section 55.

<sup>116</sup> Section 57.

authorisation, or where an international obligation necessitates such amendment.<sup>117</sup> The authority, which issued an authorisation, may also revoke one if the applicant has provided erroneous information, or authorisation regulations have been repeatedly violated, or preconditions for continuing the activity cannot be met by amending the authorisation.<sup>118</sup>

#### **5.4 The VAHTI system**

Environmental databases of the environmental administration in Finland, which include, amongst others, data on environmental authorisations issued to industry and information on discharges into water, and information on emissions into air and wastes, were first established in 1987. These were separate databases, which were independently created and operated for industrial effluents, water supply and sewage utilities, air pollution control, and fish farms.<sup>119</sup> With the development of information technology and the increased and widespread use of computers in public administration, the need arose to further develop the efficiency of the various databases and integrate them into a single national database system. Another apparent reason for the establishment of a national database system is that information needed to be collected and centralised to promote an integrated approach to authorisation administration. During the development of the integrated authorisation system at national level, it also became apparent that increased use of documentation (for example authorisation application forms) necessitated the establishment of an electronic documentation format, that should aim to lessen the amount of paper used; counter bureaucracy; speed up the process of documentation flow; result in resource savings, both human and financial; combat administrative bureaucracy; and streamline the administration of authorisations.<sup>120</sup>

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<sup>117</sup> Section 58.

<sup>118</sup> Section 59.

<sup>119</sup> Nurmio *The Monitoring and Environment Loading Data System: VAHTI Information Document 1*, and Interview, Koivisto K, Senior Environmental Officer, Central Finland Regional Environment Centre, Jyväskylä.

<sup>120</sup> Nurmio *The Monitoring and Environment Loading Data System: VAHTI Information Document 1*, and Interview, Koivisto K, Senior Environmental Officer, Central Finland Regional Environment Centre, Jyväskylä.

The above developments led to the establishment of the Monitoring and Environment Loading Data System (hereafter VAHTI) in 1997. VAHTI consists of a client application, a database server and a nation-wide network that connects the database and workstations. A web-application is also used to browse the database and to generate various reports that include reports on compliance monitoring.<sup>121</sup>

The Finnish environmental authorisation administration, which includes all three spheres of administrative authorities, makes extensive use of this database system. The principle objective of the system is to function as a tool to assist Regional Environment Centres in environmental governance efforts.<sup>122</sup> VAHTI also serves as a database for the input and storage of information on environmental authorisations of industries, as well as information on discharges into water, emissions into water, waste generation, and discharge of waste.<sup>123</sup> Whilst the system produces baseline environmental data for internal administrative use and use by various other interested parties such as the public, industry, and concerned environmental associations, it furthermore provides a comprehensive selection of reporting and monitoring tools for the diverse needs of administrative authorities. The system is employed, in addition, to facilitate task management and electronic document management, and to serve as a tool for operative monitoring of the authorisation procedure.<sup>124</sup> There are currently 250 active users (authorisation administration officers), with more or less 29 000 clients (industries) that employ the system on a regular basis to aid in the rigorous process of authorisation application and compliance monitoring.<sup>125</sup>

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<sup>121</sup> Interview, Koivisto K, Senior Environmental Officer, Central Finland Regional Environment Centre, Jyväskylä.

<sup>122</sup> Silvo *et al* 2002 *Resources, Conservation and Recycling* 48, and Nurmio *The Monitoring and Environment Loading Data System: VAHTI Information Document 1*.

<sup>123</sup> Baseline data is also produced on emissions into air, discharges into water and waste. Nurmio *The Monitoring and Environment Loading Data System: VAHTI Information Document 1*.

<sup>124</sup> Nurmio *The Monitoring and Environment Loading Data System: VAHTI Information Document 1-2*.

<sup>125</sup> Nurmio *The Monitoring and Environment Loading Data System: VAHTI Information Document 2*, and Interview, Koivisto K, Senior Environmental Officer, Central Finland Regional Environment Centre, Jyväskylä.

## **5.5 Summary and conclusions**

### **5.5.1 *The pre-2000 fragmented environmental governance regime***

The former environmental governance regime in Finland resembles the current approach in South Africa and the NWP, especially insofar as fragmentation of governance efforts is concerned.<sup>126</sup> It is evident that various sectoral acts created a fragmented environmental policy framework, which resulted in fragmentation at operational level. Various separate authorisation procedures were prescribed in terms of these acts with no internal coordination. Fragmentation was exacerbated by fragmented administrative and governance arrangements, which included unaligned and discontinuous environmental governance structures, processes and tools.

One of the mechanisms opted for by the Finnish government to achieve integration, was to consolidate some of the procedural aspects in terms of environmental authorisations, that were contained in the various sectoral acts. This approach did not necessarily include integration of administrative structures and tools, but rather alignment of governance processes and procedures. It became evident that this was not necessarily the most effective approach to achieve comprehensive and sustainable integration. It was realised that, for integration to be effective, it is necessary that integration efforts must focus on integrating the procedural elements of all, or at least the most important, sectoral environmental legislation. It is also required that integration should not only focus on procedural elements, but also substantive considerations, including integration, or alignment, of the various environmental authorities, their structures and tools, and the substantive elements of environmental authorisations.

### **5.5.2 *Contextual background***

For the achievement of effective and comprehensive integration, reforms should arguably address procedural and substantive aspects; and all relevant administrative structures, processes and tools must be integrated, preferably by way of a single act

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<sup>126</sup> See chapter 3 above.

that also abolishes various sectoral environmental acts that are environmental media-, or sectors-specific. This approach relates to the concept of a one-stop shop, where a single act regulates all environmental media in an integrated fashion; a single, or where that is not feasible, fully coordinated, authorisation procedure; and an environmental administration system that is fully integrated, or partially integrated with clearly delineated mandates and coordination measures to facilitate integration and co-operation. This form of integration was achieved by the EPA and its corresponding EPA Decree. This new regime currently represents a single codification law that essentially aims to reform decision-making mechanisms in the Finnish environmental governance sphere.

The EPA and its detailed and comprehensive decree, is an integrated legislative framework that provides for a comprehensive integrated approach by establishing integrated authorisation procedures; integrated and streamlined environmental governance structures; and integrated arrangements for other matters incidental to environmental governance. The integrated approach of the EPA is based on the IPPC Directive, with a strong emphasis on the achievement of sustainable environmental governance through the 'command and control' approach in the form of an integrated environmental authorisation system. Apart from the obvious benefits proposed by the concept of IPPC,<sup>127</sup> it is furthermore envisaged that this one-stop shop approach may contribute to, *inter alia*: more sustainable environmental protection of all environmental media; more cost-effective and efficient authorisation procedures; benefits in terms of transparency, timeous decision-making procedures, and participation of both the regulator and the regulated; and an overall more sustainable and efficient environmental governance effort.

### 5.5.3 *Objectives, scope and principles of the EPA*

The scope of application of the EPA is very comprehensive. It provides for an even broader scope of activities and installations requiring authorisations when compared to the IPPC Directive. This may be derived from the widely formulated definition of 'environmental pollution' and the application of the integrated authorisation system to

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<sup>127</sup> See paragraph 2.8 and chapter 4 above.



a comprehensive set of possible polluting activities. The principal objective of the EPA is to achieve sustainable environmental protection by way of an integrated authorisation system that is based on some general principles typically associated with an integrated authorisation system. These principles include the preventive principle, the precautionary principle, the duty of care principle, the BAT pollution standard, principles relating to best environmental practices, and the polluter-pays principle.

#### *5.5.4 The integrated environmental administration regime*

The EPA also transformed the fragmented environmental administration system in Finland. The previous administration was divided amongst several competent authorities and courts. The EPA established an integrated three-tiered system with clearly defined roles, responsibilities, mandates and jurisdictions. The authorities also consist of highly skilled teams of experts drawn from a multi-disciplinary field, and the activities of the authorisation authorities are monitored by a central lead agent, namely the Ministry of Environment. Authorisation authorities are furthermore assisted by a specialised research and development centre, SYKE, which is responsible to, *inter alia*, conduct research in support of authorisation authorities' administrative functions, to render support to industrial operators, and to provide information on environmental issues to authorisation applicants and authorities. The activities of authorisation authorities are furthermore supported by the BAT Network which aims to enhance the implementation of the IPPC Directive by promoting innovative pollution prevention and control techniques; to enhance the availability of information on authorisation requirements; and to further the utilisation of the most effective methods to address IPPC. The EPA also provides the possibility of expert consultation and involvement by other state departments which may have an interest in a particular authorisation application.

#### *5.5.5 Environmental authorisation requirements*

Activities that may cause environmental pollution need to be authorised in terms of the EPA. The environmental authorisation functions as the centrepiece mechanism in the EPA to achieve the objectives of an integrated approach to pollution prevention and control. The EPA also requires that an authorisation should be applied for where

a change is made to any previously authorised activity. It is noteworthy that the EPA and EPA Decree provide for a detailed and comprehensive list of activities that require authorisation. This may specifically contribute to promote legal certainty amongst applicants and competent authorities alike.

#### *5.5.6 The authorisation application procedure*

The EPA and EPA Decree detail to a significant degree the relevant information which must be included in an authorisation application. It is also required that information on, for example, EIAs be included in the authorisation application in order to ensure a streamlined process which may run parallel with other authorisation processes. The relevant competent authority may also require opinions from other authorisation authorities that may be affected by an environmental impact of the activity. This provision is arguably meant to establish a procedure for rapport-building, coordination and consultation between the different authorities where the environmental impact may be relevant for the jurisdiction of other authorisation authorities. When processing an authorisation application, the relevant authority must maintain all necessary contacts with other authorities who are simultaneously processing other authorisation applications and plans bearing on the same activities. A copy of the authorisation decision must also be sent to all interested and affected authorities. The application must furthermore be published and all relevant stakeholders must be given the opportunity to give their inputs. The Act furthermore provides the opportunity to lodge certain authorisation applications simultaneously. It is provided in this regard that such applications be considered and processed simultaneously. This may arguably contribute to a more transparent, informed, streamlined, and efficient process where delays in decision-making are avoided and a situation where applicants and relevant authorities may base their actions on a clear, consistent, and comprehensive procedure that may be to the benefit of the authorities, the applicant and the environment.

#### *5.5.7 Authorisation consideration procedures*

An authorisation may only be issued if it conforms to all the requirements of the EPA, the EPA Decree, and other relevant legislation. The EPA provides for a

comprehensive set of considerations which must be taken into account by the authorisation authority when considering whether to grant or refuse an authorisation. It is also required that each authorisation must contain a comprehensive set of regulations or conditions that are set by the relevant authorisation authority. Regulations or conditions must be based on various considerations that specifically relate to pollution, the quality of the environment, and all other factors that may have an influence on the environment, and that may be mitigated or regulated by authorisation conditions. Authorisation conditions must also make provision for post-decision follow-up, or monitoring procedures by both the relevant authorisation authority and industry.

#### *5.5.8 The authorisation decision*

The EPA provides for detailed requirements on the authorisation decision. These provisions should include: the duration of the authorisation, how EIA has been taken into account and included in the authorisation, publication of the authorisation decision, and administrative appeals. Provision is also made for relevant information that needs to be included by the authorisation authority in the recital and decision sections of the authorisation. This information should be comprehensive and clear, and essentially aimed at informing the applicant in a transparent fashion on how the decision was taken and the scope and effect of the decision. Detailed provision is also made for the revocation of authorisations, amendment of authorisations, and expiry of authorisations.

#### *5.5.9 The VAHTI-system*

Apart from procedural and substantive reforms of fragmented environmental governance efforts, integration may also be achieved and supported by additional tools and mechanisms such as an electronic, computer-based system. Such a system principally aims to streamline and assist in authorisation application, authorisation processing and post-decision follow-up procedures. The benefits of such a system may include: integration and collection of data and information necessary in environmental governance processes; dissemination of information to authorities and all other interested and affected parties; facilitation of monitoring and post-decision

follow-up; and measures to counter the negative effects of insufficient documentation management and bureaucracy.

## **6. THE DUTCH APPROACH TO INTEGRATED ENVIRONMENTAL GOVERNANCE**

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## Chapter 6: The Dutch approach to integrated environmental governance<sup>1</sup>

### 6.1 Introduction

In 1993 the Netherlands enacted the EMA (*Wet milieubeheer*).<sup>2</sup> The promulgation of this legislation is regarded as an important step in the process towards a more integrated approach to environmental governance.<sup>3</sup> As is the case with the Finnish EPA, the EMA is based on the IPPC Directive.<sup>4</sup>

The EMA replaces previous sectoral legislation, and more importantly, integrates various different types of authorisations into a single, integrated environmental authorisation, namely the EMA authorisation.<sup>5</sup> A more integrated, co-operative and coordinated environmental administration system is also established under the EMA.<sup>6</sup> This integrated approach represents a break from the past silo-based, sectoral and fragmented approach to pollution prevention and control in particular, and environmental governance efforts in general.<sup>7</sup>

It has been stated above, that the integrated approach of the Netherlands to environmental governance in general, and environmental authorisations in particular, may suggest possible solutions for the fragmented environmental governance regime in South Africa and the NWP.<sup>8</sup> The following questions need to be answered in order to distil comparative solutions for the South African and NWP scenario:

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<sup>1</sup> My sincere thanks to Professor Jonathan Verschuuren, Centre for Legislative Studies, Tilburg University, The Netherlands, for his helpful comments on an earlier draft of this chapter. The views expressed herein and any errors are my own.

<sup>2</sup> For a concise introduction to environmental law in the Netherlands in general, see Gilhuis and Verschuuren *Environmental Law* 355-381.

<sup>3</sup> Jongma *De Milieuvergunning* 1, and Gilhuis *Vergunningen* 149. See also Veltkamp *EG-Milieurichtlijnen in Nederland* 222-249, and Dhondt and Van Rossem *Materiële Europese Milieurecht* 482-484 for a discussion on the inception of EU Directives into Dutch law. The promulgation of the EMA may also be regarded as an important mechanism to address the various environmental concerns in the Netherlands. See Gilhuis and Verschuuren *Environmental Law* 355-357 for a discussion of sources of environmental degradation, the state of the Dutch environment, and some environmental problems in general.

<sup>4</sup> Jongma *De IPPC-richtlijn* 58.

<sup>5</sup> See paragraph 6.3 below.

<sup>6</sup> See paragraph 6.4 below.

<sup>7</sup> Seerden and Heldeweg *Environmental Law in the Netherlands* 311.

<sup>8</sup> See chapter 1 above.

1. What is the relationship between the IPPC Directive and chapter 8 of the EMA?
2. What does the past fragmented authorisation and governance regime entail?
3. What are the provisions of the EMA that establish an integrated authorisation and governance system?
4. What are the relevant provisions of the *General Administrative Law Act* that are applicable to the procedural aspects of the EMA?
5. What are 'general rules', and how do they contribute to integration?
6. What initiatives exist to establish a more flexible environmental authorisation?

## 6.2 *The relationship between the IPPC Directive and the EMA*

The promulgation of the EMA was well before the establishment of the IPPC Directive in 1996.<sup>9</sup> The general view is that the IPPC Directive did not have a significant influence on the Dutch approach to integrated environmental authorisations and governance. EU legislation however requires of EU Member States to transpose the provisions of directives into national legislation.<sup>10</sup> It has been stated above, that the Finnish EPA transposed the provisions of the IPPC Directive in a comprehensive fashion.<sup>11</sup> This is however not necessarily the case with the Dutch EMA, since this act was promulgated three years before the establishment of the IPPC Directive.<sup>12</sup> The question accordingly arises to what extent the provisions of the EMA correspond with those of the IPPC Directive, and to what extent the provisions of the IPPC Directive have been incorporated into the EMA.<sup>13</sup>

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<sup>9</sup> See chapter 4 above.

<sup>10</sup> Gilhuis and Verschuuren *Is er nog Verschil en moet er nog Verschil zijn?* 125-132.

<sup>11</sup> See chapter 5 above. For an interesting comparative perspective on the reception of the IPPC Directive into Flemish environmental law, see Larmuseau *De IPPC Richtlijn* 3-52.

<sup>12</sup> See also paragraph 6.1 above.

<sup>13</sup> See for a comprehensive discussion on the effect that the IPPC Directive had on the EMA, Van den Broek 1997 *Milieu & Recht* 7-15.

Apart from its function as centrepiece legislation for environmental management and governance in the Netherlands, the EMA also serves as an implementation act.<sup>14</sup> Chapter 8 of the EMA namely implements the provisions of the IPPC Directive, albeit in a retrospective fashion.<sup>15</sup> It is stated in this regard that the Dutch government has to date not given much thought to the IPPC Directive in terms of comprehensive legislative amendments of existing legislation in order to conform to the provisions of the Directive.<sup>16</sup> This is because the EMA is regarded as being comprehensive enough to have sufficiently incorporated the provisions of the IPPC Directive.<sup>17</sup>

All aspects regulated by the IPPC Directive are considered to have been dealt with by chapter 8 of the EMA.<sup>18</sup> In this context, the IPPC Directive is also considered to be the European equivalent of the EMA, since both instruments essentially aim to break from the past sectoral and fragmented approach that considered environmental media and pollution in isolation.<sup>19</sup> Both these instruments are so-called 'horizontal' legislation that aims to regulate the various emissions from a single industrial installation in an integrated fashion.<sup>20</sup> Although the argument seems to be that there are more similarities between the IPPC Directive and the EMA than dissimilarities, it is stated in this regard by Jongma,<sup>21</sup> that the IPPC Directive may be regarded as a more effective and comprehensive regulatory mechanism than the EMA.<sup>22</sup>

Some concerns have however been expressed that relate to, amongst others, the relationship between the IPPC Directive-based requirements of BAT<sup>23</sup> that functions alongside the EMA-based principle of 'as low as reasonably achievable' (hereafter ALARA).<sup>24</sup> Criticism of the implementation of the IPPC Directive provisions also relates to concerns regarding the fact that the authorisation under the *Surface Water Pollution Act* of 1969 (*Wet verontreiniging oppervlaktewateren*) (hereafter the

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<sup>14</sup> Gilhuis *Vergunningen* 151, and Gilhuis and Verschuuren *Environmental Law* 360-361.

<sup>15</sup> Gilhuis *Vergunningen* 151.

<sup>16</sup> Jongma *De Milieuvergunning* 3.

<sup>17</sup> Gilhuis 1999 *Milieu & Recht* 283.

<sup>18</sup> Jongma *De Milieuvergunning* 3, and Jongma and Van't Lam *Milieuvergunning in Nederland* 26.

<sup>19</sup> Jongma *De Milieuvergunning* 36, Jongma and Van't Lam *Milieuvergunning in Nederland* 12, Jongma *De IPPC Richtlijn* 58, and chapter 4 above.

<sup>20</sup> See paragraph 2.8 above.

<sup>21</sup> Jongma *De IPPC-richtlijn* 57-77.

<sup>22</sup> Also see Gilhuis and Verschuuren *Is er nog Verschil en moet er nog Verschil zijn?* 125-127.

<sup>23</sup> Faure *IPPC-richtlijn* 131, and chapter 3 above.

<sup>24</sup> Jongma *De Milieuvergunning* 87-88 and paragraph 6.4.6 below.



SWPA), was not integrated into the EMA authorisation.<sup>25</sup> Since one of the main aims of the IPPC Directive is to establish integration and harmonisation with regard to environmental authorisations, the latter development may arguably be contrary to the essential spirit and purport of the IPPC Directive.<sup>26</sup>

Having noted some of these concerns, the Dutch government is in the process of establishing a new act that will more comprehensively and explicitly incorporate the provisions of the IPPC Directive.<sup>27</sup> Gilhuis and Verschuuren<sup>28</sup> observe in this regard that "...this scheme [integration initiatives in terms of the EMA] was never intended as a blueprint for the future...and that recently a plea has been made for more normative legislation". It is envisaged that this new legislation will be in force by the year 2006 and it is accordingly not further discussed for the purpose of this study.<sup>29</sup>

### ***6.3 The previous fragmented environmental governance regime***

Until 1993, the environmental policy framework in the Netherlands consisted of a number of media-specific and sectoral environmental acts.<sup>30</sup> These acts include, amongst others, the *Nuclear Energy Act* of 1963 (*Kernenergiewet*); the *Air Pollution Act* of 1970 (hereafter the APA) (*Wet inzake de luchtverontreiniging*); the *Chemical Waste Act* of 1976 (hereafter the CWA) (*Wet chemische afvalstoffen*); the *Soil Protection Act* of 1986 (hereafter the SPA) (*Wet bodembescherming*); the *Waste Products Act* of 1977 (hereafter the WPA) (*Afvalstoffenwet*); the *Environmental Hazardous Waste Act* of 1985 (hereafter the EHWA) (*Wet milieugevaarlijke stoffen*);

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<sup>25</sup> See paragraph 6.3 below.

<sup>26</sup> See chapter 4 above. Further criticism also relates to the dubious relationship between the definition of 'installation' in terms of the IPPC Directive and the EMA. See Faure *IPPC-richtlijn* 131, and paragraph 6.4.2 below.

<sup>27</sup> See in this regard Seerden and Heldeweg *Public Environmental Law* 349, 392-393, and paragraph 6.7 below.

<sup>28</sup> Gilhuis and Verschuuren *Environmental Law* 364.

<sup>29</sup> Jongma *De IPPC-richtlijn* 67.

<sup>30</sup> Gilhuis *Inleiding* 75-78. See also Drupsteen *et al Toekomst van de Wet Milieubeheer* 136-166, for a comprehensive discussion on the evolution of the integrated approach. It should also be noted that this fragmented approach was based on a legal order that did not provide for a constitutional environmental right. Only in 1983 was an environmental right introduced in the Dutch Constitution, by way of section 21. Section 21 states that the duty of care of the government is aimed at the inhabitation of the land and the protection and improvement of the environment. See further Seerden and Heldeweg *Public Environmental Law* 347-348, and Gilhuis and Verschuuren *Environmental Law* 358-359. See for a detailed discussion on the historical development of the EMA, Evaluatiecommissie Wet Milieubeheer *Onderzoek Integrale Milieuvergunning* 3-7.

the (*Noise Nuisance Act* of 1979 (hereafter the NNA)(*Wet geluidhinder*); and the SWPA.<sup>31</sup> The idea was to introduce environmental legislation for each of the different environmental elements or media, since it was believed that "...a comprehensive system of environmental protection could be achieved".<sup>32</sup> Another reason for the establishment of sectoral acts, rather than a fully integrated act, may be attributed to pragmatic considerations where it was argued that the division of tasks, competencies and specialist knowledge in terms of the policy framework and administrative tasks, may be the best approach to achieve a high level of environmental protection.<sup>33</sup> A number of different authorisations were also provided in terms of these acts, including, *inter alia*, authorisations under the NNA, the APA, the WPA, the CWA, and the *Mines Act* of 1903 (hereafter the MA) (*Mijnwet*).<sup>34</sup> These 'classical' authorisations placed an onerous administrative burden on the environmental administration and authorisation applicants because of their detailed conditions and requirements.<sup>35</sup> It also became clear that authorisation applicants would have to apply for a number of different authorisations that are subject to various different authorisation procedures, regulated by different administrative authorities.<sup>36</sup> The sectoral approach gave rise to a number of further difficulties. Technical differences in regulation caused confusion for administrative bodies, authorisation applicants, and other interested parties; uncertainty arose with regard to mandates as well as with regard to which act covered which activity; and the sectoral approach ultimately hampered an integrated approach to different forms of pollution

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<sup>31</sup> Whilst the WPA and the CWA have been fully integrated in the EMA, the APA and the NNA have been partially integrated. See in this regard Seerden and Heldeweg *Environmental Law in the Netherlands* 278.

<sup>32</sup> Seerden and Heldeweg *Environmental Law in the Netherlands* 274, Seerden and Heldeweg *Public Environmental Law* 348, and Gilhuis and Verschuuren *Environmental Law* 359.

<sup>33</sup> Evaluatiecommissie Wet Milieubeheer *Onderzoek Integrale Milieuvergunning* 3.

<sup>34</sup> Gilhuis *Vergunningen* 149-150. For a more detailed discussion on these various acts, see Neuerburg and Verfaillie *Nederlandse Milieurecht* 241-245. It should be noted in this regard that the environmental authorisation has played, and still plays, an important role in Dutch environmental governance efforts. This is despite wide-spread criticism against the authorisation as an environmental governance tool. Although some of the functions of the classical environmental authorisation have been replaced by that of general rules in terms of Dutch legislation, the authorisation remains an important instrument to regulate pollution activities of large industrial plants and transboundary pollution activities. See further in this regard, Jongma *De Milieuvergunning* 5-7, and paragraphs 6.6 and 6.7 below.

<sup>35</sup> Jongma *De Milieuvergunning* 2, and Evaluatiecommissie Wet Milieubeheer *Onderzoek Integrale Milieuvergunning* 30. See also Van Dooren 1976 *Milieu & Recht* 222-235, for a discussion on the onerous and burdensome authorisation procedures that applied in the 1970s.

<sup>36</sup> Seerden and Heldeweg *Environmental Law in the Netherlands* 275, Seerden and Heldeweg *Public Environmental Law* 348, and Evaluatiecommissie Wet Milieubeheer *Onderzoek Integrale Milieuvergunning* 4.

from a single industrial installation. Apart from fragmentation at policy level, fragmentation was also evident with regard to the administrative structure. Responsibility for environmental regulation was divided between five different ministries, including the Ministry of Housing, Spatial Planning and the Environment (hereafter the MHSPE) (*Ministerie van Volkshuisvesting, Ruimtelijke Ordening en Milieubeheer*), the Ministry of Transport and Waterways (hereafter the MTW) (*Ministerie van Verkeer en Waterstaat*), the Ministry of Culture, Recreation and Social Welfare (*Ministerie van Cultuur, Recreatie en Maatschappelijk Werk*); and the Ministry of Agriculture and Fisheries (hereafter the MAF) (*Ministerie van Landbouw en Visserij*).<sup>37</sup> It is specifically stated in this regard that the past administrative structure was not an integrated whole, but was scattered over a number of different authorities.<sup>38</sup> This made efficient coordination essential. Although some coordination was achieved by coordinating bodies, the structures remained fragmented with no substantial integrated bodies to address sustainable environmental protection.<sup>39</sup>

The need accordingly arose for a more integrated legislative basis and a more flexible, simple, and integrated authorisation procedure whereby more comprehensive environmental protection is provided for, and self-regulation is made possible to lessen the burden on the administration and the authorisation applicant.<sup>40</sup> For this purpose, the *General Provisions on Environmental Health Act* of 1979 (hereafter the GPEHA) (*Wet algemene bepalingen milieuhygiëne*), was promulgated in order to provide for certain streamlined procedural aspects relating to environmental governance and management.<sup>41</sup> The promulgation of the GPEHA was thus essentially a reaction to the fragmented approach that was inaccessible and unnecessarily complex.<sup>42</sup> The GPEHA provided, *inter alia*, for a set of procedures for granting environmental authorisations under sectoral acts, for coordinating the various authorisation procedures under sectoral legislation, and for public participation

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<sup>37</sup> Environmental Resources Limited *Pollution Control in the Netherlands* 6.

<sup>38</sup> Environmental Resources Limited *Pollution Control in the Netherlands* 6.

<sup>39</sup> Environmental Resources Limited *Pollution Control in the Netherlands* 7.

<sup>40</sup> Jongma *De Milieuvergunning* 2, Gilhuis and Verschuuren *Environmental Law* 361, and Evaluatiecommissie Wet Milieubeheer *Onderzoek Integrale Milieuvergunning* 4.

<sup>41</sup> See in this regard Jongma *De Milieuvergunning* 1. Seerden and Heldeweg *Public Environmental Law* 348, and Gilhuis *Wabm: Een Zinnige Onderneming?* 49-60. See also Environmental Resources Limited *Pollution Control in the Netherlands* 13-30, for a comprehensive discussion on the provisions of the GPEHA.

<sup>42</sup> Gilhuis and Verschuuren *Environmental Law* 361.

procedures and judicial review.<sup>43</sup> The emphasis of the GPEHA was however on legal, procedural and technical harmonisation of legislation, rather than on material or substantive integration of all aspects relating to environmental governance. The GPEHA furthermore did not substantially integrate sectoral legislation by incorporation. The result was accordingly that transparency of the decision-making procedure was not promoted, nor was the possibility created that all elements and interests in the administrative decision-making procedure could be considered and integrated.<sup>44</sup>

During the course of the early 1980s, increased emphasis was placed on the idea that deregulation of environmental legislation was necessary to avoid time-consuming, costly, and onerous authorisation procedures, by stimulating self-regulation and internalisation of environmental care.<sup>45</sup> In order to facilitate self-regulation, general rules were introduced that replaced authorisations for specified categories of potentially polluting activities; standards were set that provided for a specified level of pollution; gentlemen's agreements were introduced between government and industry; and a general duty-of-care was provided for.<sup>46</sup>

It was only with the promulgation of the EMA in 1993, that a comprehensively integrated, uniform and coordinated approach was achieved.<sup>47</sup> In essence, the EMA is an enlarged, albeit fully renewed version of the GPEHA, that provides for internal and external integration of environmental concerns.<sup>48</sup> Whilst internal integration in this instance refers to the establishment of a single act that deals with several types of pollution and nuisance under one act, external integration refers to integration of

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<sup>43</sup> Seerden and Heldeweg *Environmental Law in the Netherlands* 275, and Gilhuis and Verschuuren *Environmental Law* 361.

<sup>44</sup> Seerden and Heldeweg *Environmental Law in the Netherlands* 276. Emphasising the ineffectiveness of the GPEHA to establish integration, Gilhuis and Verschuuren *Environmental Law* 362 further states that the GPEHA "was conceived from the outset as add-on legislation."

<sup>45</sup> Seerden and Heldeweg *Environmental Law in the Netherlands* 275; Seerden and Heldeweg *Public Environmental Law* 348; Gilhuis and Verschuuren *Environmental Law* 359, 362; Hofland 1986 *Milieu & Recht* 261; and Tonnaer *Milieurecht in Ontwikkeling* 133-134.

<sup>46</sup> Seerden and Heldeweg *Environmental Law in the Netherlands* 275, and Verschuuren 1996 *Nederlandse Juristenblad* 1349-1352.

<sup>47</sup> Gilhuis and Verschuuren *Environmental Law* 363, and Evaluatiecommissie Wet Milieubeheer *Onderzoek Integrale Milieuvergunning* 1, 6. See also paragraph 6.4 below for a detailed discussion.

<sup>48</sup> Seerden and Heldeweg *Public Environmental Law* 348-349, and Drupsteen *et al Toekomst van de Wet Milieubeheer* 135-184.

environmental policies into, for example, urban planning and transport policies,<sup>49</sup> as well as coordination of environmental plans, environmental quality standards,<sup>50</sup> and environmental authorisations.<sup>51</sup> The principal motives for internal integration must be considered in the context of the need to establish an integrated policy framework for the environment, and the need to simplify procedural and substantive aspects of environmental regulation.<sup>52</sup> An integrated environmental policy framework should prevent the shifting of environmental problems from one sector to another by establishing integrated policy instruments for regulation. Simplification of environmental legislation on the other hand provides the possibility of establishing uniform procedures, simplification of relationships between different environmental acts, integrated administrative structures, and simplification of jurisdictions.<sup>53</sup>

Gilhuis and Verschuuren<sup>54</sup> summarise the considerations that led to a more integrated approach as: an integrated system allows that all relevant environmental aspects can be weighed-up at the decision-making stage, which in turn avoids the situation where pollutants are shifted between different media; integrated legislation provides a better structure for key environmental concepts, including sustainable development, energy saving, and integral life-cycle management; industry and other possible polluters may in terms of an integrated system be approached from a general perspective and by one single administrative body only; citizens, firms and administrative authorities are

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<sup>49</sup> As far as integration of planning and land use aspects into the authorisation procedure are concerned, it is noted that there is a procedural linkage between the EIA process and the authorisation procedure in terms of the EMA. The general idea is that the EIA and authorisation application are presented simultaneously. Hence, the EIA can also play an important informative role in the authorisation application procedure. See further Seerden and Heldeweg *Public Environmental Law* 370. It is also observed in this regard that, because a significant amount of information regarding the impact of a proposed project is established by way of the EIA procedure, it may result in more streamlined and integrated procedures in the overall decision-making process. In order to avoid excessive costs, and in order to establish a more timeous and efficient decision-making process, it has however been recommended that there should be a more effective incorporation of the EIA process into the authorisation process. See further, Gilhuis and Verschuuren *Environmental Law* 371.

<sup>50</sup> Chapter 5 of the EMA provides for the setting of environmental quality standards. These standards are relevant for the EMA authorisation, especially insofar as they relate to the effects of certain substances on the environment, including industrial emissions. Three different types of standards may be distinguished, including: strict standards, reasonable standards, and aspired standards. See for a further discussion, Seerden and Heldeweg *Public Environmental Law* 357-358.

<sup>51</sup> Seerden and Heldeweg *Public Environmental Law* 349, Gilhuis and Verschuuren *Environmental Law* 360, and Evaluatiecommissie Wet Milieubeheer *Onderzoek Integrale Milieuvergunning* 27-28. Only internal integration is comprehensively discussed for the purpose of this study. See for a comprehensive discussion on external integration, Drupsteen *et al Toekomst van de Wet Milieubeheer* 167-184.

<sup>52</sup> Drupsteen *et al Toekomst van de Wet Milieubeheer* 141.

<sup>53</sup> Drupsteen *et al Toekomst van de Wet Milieubeheer* 142-143.

<sup>54</sup> Gilhuis and Verschuuren *Environmental Law* 362-363.

provided with a more straight-forward and simple system of legislative requirements; and enforcement and implementation of environmental legislation may become significantly easier, since problems caused by demarcation between sectoral acts are avoided.<sup>55</sup>

## **6.4 The provisions of the EMA**

### **6.4.1 Background**

Chapter 8 of the EMA is regarded as the centrepiece provision for integrating the previously diversified and fragmented authorisation system that was essentially founded on a silo-based, sectoral, and environmental media-specific approach.<sup>56</sup> The main rationale behind the EMA is to "...offer general provisions regardless of the specific environmental issue involved".<sup>57</sup> The primary aim of an integrated authorisation in terms of chapter 8 of the EMA, is the provision of efficient and effective environmental protection by way of an integrated consideration of all environmental aspects, and consideration of the most effective way to deal with environmental pollution.<sup>58</sup> The EMA includes authorisation procedures of six different acts,<sup>59</sup> and two exemptions<sup>60</sup> that were previously regulated in terms of sectoral legislation. Whilst the WPA and the CWA have been fully integrated in the EMA, the APA and the NNA have been partially incorporated.<sup>61</sup>

Although the EMA is referred to as an integrated act, it should be noted that it does not provide for total integration, since some activities still require authorisation under

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<sup>55</sup> Gilhuis and Verschuuren *Environmental Law* 362-363, 369. See also for an insightful discussion on the motives for integration, Drupsteen *Relativiteit van Integratie* 61-67.

<sup>56</sup> Seerden and Heldeweg *Environmental Law in the Netherlands* 276, and Gilhuis and Verschuuren *Environmental Law* 363. Apart from provisions on environmental authorisations, the EMA furthermore contains chapters on, *inter alia*, preliminary matters, advisory bodies, planning, quality standards, EIA, waste products, monitoring and registration, financial arrangements, calamities, enforcement, public participation, and judicial review. Only those provisions that relate to the integration of environmental authorisations are further discussed for the purpose of this study.

<sup>57</sup> Seerden and Heldeweg *Public Environmental Law* 349-350.

<sup>58</sup> Evaluatiecommissie Wet Milieubeheer *Onderzoek Integrale Milieuvergunning* 8-9.

<sup>59</sup> These authorisations and accompanying procedures include authorisations in terms of the *Nuisance Act* of 1952 (*Hinderwet*), the NNA, the APA, the WA, the CWA and the MA. See also Jongma *De Milieuvergunning* 93.

<sup>60</sup> These exemptions are in terms of the SPA and CWA.

<sup>61</sup> Gilhuis *Vergunningen* 150, and Gilhuis 1993 *Milieu & Recht* 87.

other sectoral legislation.<sup>62</sup> These activities include authorisations in terms of the SWPA,<sup>63</sup> the *Groundwater Act* of 1981 (*Grondwaterwet*), the NEA, the *Sea Pollution Act*, 1997 (*Wet verontreiniging zeewater*), the MA, the *Destruction Act* of 1957 (*Deconstructiewet*), and the *Act on the Disposal of Animal Wastes* of 1986 (*Meststoffenwet*).<sup>64</sup> Integration in terms of the EMA also does not cover aspects relating to nature or water protection.<sup>65</sup>

As is the case in Finland, authorisations are widely used in the Netherlands as instruments to regulate environmental pollution.<sup>66</sup> By way of an authorisation, it is possible to ascertain pollution activities and effects of industries on an individual basis.<sup>67</sup> This is significant insofar as it provides the opportunity to accurately regulate environmental pollution through predetermined limitations, provisions and requirements.<sup>68</sup> This is arguably also the cornerstone of chapter 8 of the EMA, which contains the legislative provisions pertaining to environmental authorisations.<sup>69</sup> Chapter 8 provides for three different types of authorisations. These include: an

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<sup>62</sup> Jongma and Van't Lam *Milieuvergunning in Nederland* 13. Michiels *Wet Milieubeheer* 47-48, observes that one should rather speak of a combined authorisation, rather than an integrated authorisation. Gilhuis and Verschuuren *Environmental Law* 365 emphasise a further point which should be taken into account in all integration reforms, when stating that:

...it appears that the EMA is not automatically the framework for integration in relation to every environmental area. In some cases other integration frameworks are just as suitable, and in some cases even more suitable, than the EMA. When engaging in codification of environmental law, therefore, it is appropriate to give timely consideration to the question as to what is the context in which a particular subject can best be regulated.

This does however not depart from the notion that the EMA has contributed, and still contributes, significantly to integration of the Dutch environmental governance effort. See also for a further discussion, Verschuuren *Grenzen aan Integratie?* 69-75.

<sup>63</sup> Because of political and administrative reasons, it was explicitly decided by the Dutch government not to incorporate the SWPA authorisation in the EMA. The negative effect that this may have on an efficient integrated model was however noted and provision was made for coordination and alignment of this authorisation and the EMA authorisation. See further Gilhuis *Vergunningen* 150, and Jongma and Van't Lam *Milieuvergunning in Nederland* 13.

<sup>64</sup> Gilhuis 1993 *Milieu & Recht* 87, and Seerden and Heldeweg *Public Environmental Law* 350.

<sup>65</sup> Gilhuis and Verschuuren *Environmental Law* 365, and Jongma *De Milieuvergunning* 94.

<sup>66</sup> Gilhuis *Vergunningen* 149, and Teesing and Uylenburg *Toegang tot het Milieurecht* 115. Jongma *De Milieuvergunning* 1, states that the environmental authorisation is a classic instrument to regulate environmental pollution. The continual development of environmental law in the Netherlands however also progressively provides for various new instruments and procedures for such regulation. The latter include, *inter alia*, methods for self-regulation and fiscal based instruments. See further in this regard Seerden and Heldeweg *Environmental Law in the Netherlands* 280-281, Seerden and Heldeweg *Public Environmental Law* 353-354, Seerden, Heldeweg and Deketelaere *Comparative Remarks* 573, and Jongma and Van't Lam *Milieuvergunning in Nederland* 11. See also Van der Tak *Vergunning Verleend* 1-209, and De Vries Robbé 1992 *Onderneming & Milieu* 32-35, for a more comprehensive discussion on the role of authorisations as regulatory instruments in the Dutch environmental law framework.

<sup>67</sup> See paragraph 6.4.1 above.

<sup>68</sup> Gilhuis *Vergunningen* 149.

<sup>69</sup> Gilhuis *Vergunningen* 149.

authorisation for establishment of an installation (*oprichtingsvergunning*), an authorisation for expansion or modification of an installation (*uitbreidings-en wijzigingsvergunning*), and a revision authorisation (*revisievergunning*).<sup>70</sup> Whilst the first type of authorisation refers to the erection or establishment of an installation, the second type relates to an already existing installation, where, for example, certain components are upgraded.<sup>71</sup> The third type of authorisation is applicable in those instances where substantial changes to an installation are required over a long period of time.<sup>72</sup>

The scope of the EMA authorisation is wide. This may be attributed to the fact that the authorisation is coupled with the widely defined, but integrated notion of 'environment' held under the EMA.<sup>73</sup> When interpreting the concept of environment, section 1(2) of the EMA duly acknowledges the need for an integrated approach, since environmental considerations pertain to the removal of pollutants from the environment, the use of energy and other resources, as well as the transport of people and substances to and from the installation.<sup>74</sup> The EMA authorisation is accordingly firmly based on the concept of an integrated environment, which, through its widely applicable scope, provides the opportunity to consider all aspects relevant to the environment in the authorisation process.<sup>75</sup> It is therefore not so much an authorisation for pollution prevention *per se*, but rather an authorisation pertaining to the environment as a whole, as well as all activities connected thereto.<sup>76</sup> In other words, the scope of the authorisation is not applicable to only the essential activity it should authorise, but is rather applicable to the sum of all the relevant individual aspects.<sup>77</sup>

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<sup>70</sup> Jongma and Van't Lam *Milieuvergunning in Nederland* 14, Van den Broek *et al* (eds) *Wet Milieubeheer in Bedrijf* 20, Verwoerd *Milieurecht* 150-154, and Michiels *Wet Milieubeheer* 70-72. It is also important to note in this regard that an authorisation applies to the persons that operate the installation. In the instance that the installation is, for example, sold to someone else, the authorisation automatically applies to the new owner of the installation. This is regulated by section 8.20 of the EMA. See for a detailed discussion Freriks and Kniff 2003 *Milieu & Recht* 2-7, and Van den Broek *et al* (eds) *Wet Milieubeheer in Bedrijf* 22-23.

<sup>71</sup> Van den Broek *et al* (eds) *Wet Milieubeheer in Bedrijf* 20.

<sup>72</sup> Van den Broek *et al* (eds) *Wet Milieubeheer in Bedrijf* 20.

<sup>73</sup> It is stated in this regard that the definition of 'environment' under the EMA has an even wider scope than the collective scope of 'environment' in terms of the various sectoral acts that were integrated into the EMA. See further Gilhuis and Verschuuren *Environmental Law* 369.

<sup>74</sup> Van Geest *Wet Milieubeheer* 105.

<sup>75</sup> Van Geest *Wet Milieubeheer* 105.

<sup>76</sup> Gilhuis *Vergunningen* 150.

<sup>77</sup> Gilhuis *Vergunningen* 150.



Subsequent paragraphs discuss those provisions of the EMA that are significant in the context of an integrated environmental authorisation and governance regime.

#### 6.4.2 *The installation, and its obligation to authorise*

Section 8.1.1 of the EMA provides for the obligation to obtain an authorisation for the establishment and change of operation of an installation (*inrichting*).<sup>78</sup> Since an installation, through its activities, may constitute a major source of environmental pollution, the central emphasis of section 8.1 is on the installation *per se*. 'Installation' is defined by section 1.1.4 as any human business activity, or activity that in size may be considered to be business-like, and which are set within certain boundaries.<sup>79</sup> The installation should be 'business-like' in the sense that a profit should be made, or at least, that a prospect to make a profit, should exist.<sup>80</sup> Other factors that may also be taken into account in the determination of an installation for the purpose of the Act, include the manner of resource exploitation and the scope and frequency of activities.<sup>81</sup> Establishments that belong to the same company or organisation that are technically, organisationally or functionally intertwined, and which are located in close proximity to one another are also considered to be part of an installation.<sup>82</sup> These may include mobile installations.<sup>83</sup> It is also important that an activity carried out at the installation, should be of a regular and continuing nature and that it should

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<sup>78</sup> Gilhuis 1993 *Milieu & Recht* 88, Van den Broek *et al* (eds) *Wet Milieubeheer in Bedrijf* 12, and Teesing and Uylenburg *Toegang tot het Milieurecht* 116-117. It should be noted that an authorisation is not required for all changes to an existing installation. If the change does not fall in the scope of provisions of the existing authorisation and the change does not lead to more significant consequences for the environment than currently is the case, the applicant may simply notify the relevant competent authority of such a change. There must however be a written agreement between the applicant and the relevant competent authority. Section 8.1.3 further provides some flexibility in authorisations to leave room for future changes without a further authorisation requirement. See paragraph 6.7 below, Seerden and Heldeweg *Public Environmental Law* 359-360, and Jongma and Van't Lam *Milieuvergunning in Nederland* 14-15, for a further discussion.

<sup>79</sup> Seerden and Heldeweg *Environmental Law in the Netherlands* 285, and Michiels *Wet Milieubeheer* 43-47. This is the first legislative attempt to define what an installation is. The fact that the EMA defines 'installation' may arguably be viewed as an attempt to clearly delineate the scope of application of the authorisation system. Jurisprudence also dictates that a wide meaning should be attributed to the concept 'installation'. See further in this regard, Gilhuis *Vergunningen* 151-153. As far as 'boundaries' are concerned, it is stated that the boundaries may either be physical in nature or at least, the operators of the installation must have an exclusive claim to a certain geographical area. See in this regard Jongma and Van't Lam *Milieuvergunning in Nederland* 17.

<sup>80</sup> Jongma and Van't Lam *Milieuvergunning in Nederland* 16.

<sup>81</sup> Jongma and Van't Lam *Milieuvergunning in Nederland* 16.

<sup>82</sup> Section 1.1.4. See also in this regard, Seerden and Heldeweg *Environmental Law in the Netherlands* 285, and Jongma and Van't Lam *Milieuvergunning in Nederland* 17-19.

<sup>83</sup> Van den Broek *et al* (eds) *Wet Milieubeheer in Bedrijf* 14.

have a degree of permanence in a certain place with regard to its location.<sup>84</sup> Whether an activity may be regarded as being part of an installation will depend on the circumstances in each case, since there do not exist any clear criteria to ascertain whether or not an installation may be regarded as such.<sup>85</sup> It may however be derived from the foregoing that the Act's definition of installation is very broad, and that almost all activities may constitute an installation.<sup>86</sup> It is stated in this regard that the EMA definition is even wider than the definition of 'installation' in terms of the IPPC Directive.<sup>87</sup>

When it is established that the authorisation applicant is in fact an installation as defined under the EMA, and that an activity may be considered to be part of an installation, what remains, is to ascertain whether the installation is under the obligation to obtain an authorisation in terms of the *Establishments and Licences Decree (inrichtingen-en vergunningenbesluit milieubeheer)* (hereafter the EL Decree).<sup>88</sup> The EL Decree sets out various categories of installations in appendices I and II to the Decree.<sup>89</sup> When the aforementioned provisions have been met, it may be conclusively deduced that the installation will be under the obligation to obtain an authorisation.<sup>90</sup> At this stage in the authorisation procedure, the authorisation applicant should also ascertain whether the application resorts under the general rules.<sup>91</sup> If this is the case, the applicant will not be subject to the traditional

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<sup>84</sup> Gilhuis *Vergunningen* 152-153.

<sup>85</sup> Gilhuis *Vergunningen* 152-153.

<sup>86</sup> Van den Broek *et al* (eds) *Wet Milieubeheer in Bedrijf* 12.

<sup>87</sup> Jongma and Van't Lam *Milieuvergunning in Nederland* 20-21.

<sup>88</sup> Section 1.1.4. See also Seerden and Heldeweg *Environmental Law in the Netherlands* 285, and Van den Broek *et al* (eds) *Wet Milieubeheer in Bedrijf* 15. The EL Decree contains a comprehensive description of a number of installations in appendices I and II thereto. Apart from this comprehensive description, there also exist general categories of installations so as to encapsulate as many installations as possible. It should also be noted that different activities may be performed at different locations. The question may accordingly arise whether these activities should be regarded as one or more installations. This may be significant since it gives rise to the question on whether the installations and activities should be gathered under a single or multiple authorisations. The most applicable criteria in this regard would be that there is a single installation if there is proof of sufficient technical, functional and organisational coherence. Moreover, the distance between the different locations should not be too great. Gilhuis *Vergunningen* 153-154. See also paragraph 6.7 below for a discussion on the 'umbrella' authorisation, which may be used in these instances as a flexible authorisation method.

<sup>89</sup> The EL Decree is not only important insofar as it stipulates the applicable installations. The relevant competent authority may also be ascertained in terms of the appendices to the EL Decree. See further, Van den Broek *et al* (eds) *Wet Milieubeheer in Bedrijf* 15.

<sup>90</sup> Gilhuis *Vergunningen* 153.

<sup>91</sup> See paragraph 6.6 below for a detailed discussion.

administrative procedures coupled with the EMA authorisation, but will be eligible for the less stringent and less detailed procedure associated with general rules.<sup>92</sup>

#### 6.4.3 *The relevant competent authority*

Generally speaking, responsibility for national environmental policy in the Netherlands rests primarily with three ministries, namely the MHSPE, the MTW, and the MAF.<sup>93</sup> Implementation of environmental policy and legislation is the responsibility of local and provincial administrative authorities.<sup>94</sup>

According to section 8.2.1, the competent authority will in most instances be the mayor or alderman (*burgemeester* or *wethouder*) of a municipality in whose jurisdiction the installation is situated.<sup>95</sup> They will be the competent authorities with regard to installations stipulated in appendix I to the EL Decree, unless the Decree specifically stipulates that the provincial authority (*gedeputeerde staten*) will be the competent authority.<sup>96</sup> This authority at local level deals with most of the authorisation applications.<sup>97</sup> The municipality is also the competent authority with regard to its own activities in its jurisdiction.<sup>98</sup>

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<sup>92</sup> See paragraph 6.6 below for a detailed discussion on general rules.

<sup>93</sup> Gilhuis and Verschuuren *Environmental Law* 357-358. See for a general discussion on the integrated enforcement of environmental law in the Netherlands, Biezeveld 1999 *Milieu & Recht* 250-256.

<sup>94</sup> Gilhuis and Verschuuren *Environmental Law* 358. For a general discussion on the most important effects of European environmental law on provincial authorities in the Netherlands, see Den Hartog 1998 *Milieu & Recht* 124-127. The important role of provincial authorities in enforcing and applying environmental law provisions is, for example, evident from the fact that provincial authorities had an important role to play in the establishment of BREFs in terms of the IPPC Directive and the EMA. See paragraph 4.11 above. This is especially because of their vast experience in the authorisation procedure. For a discussion on the administrative implementation style relating to the EMA authorisation, see Evaluatiecommissie Wet Milieubeheer *Milieuvergunning in Bedrijf* 32-48.

<sup>95</sup> Gilhuis *Vergunningen* 154, Seerden and Heldeweg *Environmental Law in the Netherlands* 285, Gilhuis 1993 *Milieu & Recht* 88-89, and Teesing and Uylenburg *Toegang tot het Milieurecht* 117-118. As far as the environmental administration is concerned, there rests an obligation on authorities to conduct proper environmental planning that includes: strategic environmental plans and operational environmental programmes. Environmental planning is however not directly relevant for the purpose of this study and is accordingly not further discussed. See for a discussion in this regard, Seerden and Heldeweg *Public Environmental Law* 355-357, and Gilhuis and Verschuuren *Environmental Law* 368-369. See also for an interesting discussion on the relationship between the legal nature of enforcement competencies of the various authorities, and the requirements of a modern *rechtsstaat*, such as the Netherlands, Blomberg *Integrale Handhaving van het Milieurecht* 346-371.

<sup>96</sup> Gilhuis *Vergunningen* 155.

<sup>97</sup> Van den Broek *et al* (eds) *Wet Milieubeheer in Bedrijf* 23.

<sup>98</sup> Before 1993, the provincial authority was the competent authority in respect of activities of the municipality. Gilhuis *Vergunningen* 154.

There are a number of exceptions to this general rule in section 8.2. Firstly, the provincial authority will be the competent authority if the nature and size of the installation and its activities may have a severe detrimental impact on the environment.<sup>99</sup> Secondly, where there is more than one category stipulated in appendix I to the EL Decree that are applicable to an installation, and the provincial authority is the competent authority in respect of one of these categories, the provincial authority will be the competent authority in respect of the whole authorisation procedure.<sup>100</sup> Thirdly, appendix II to the EL Decree sets out certain activities in respect of which the MHSPE will be the competent authority.<sup>101</sup> These specifically concern activities and installations relevant for national security and defence, and installations dealing with issues relating to specialised medical research.<sup>102</sup> In addition, the MTW will be the competent authority in respect of activities relating to dumping of polluted sediments from dredging (*baggerspecie*)<sup>103</sup> at sea, whilst the Ministry of Economic Affairs (hereafter the MEA) (*Ministerie van economische zaken*) is the designated competent authority in respect of surface mining activities.<sup>104</sup>

#### 6.4.4 The authorisation application procedure

After the relevant competent authority has been determined, the authorisation applicant is required to submit the application to this authority. This should be done

<sup>99</sup> Section 8.2.2. In general, these installations are those that were provided for under the previous authorisations systems of the WA, the APA and the NNA. See further in this regard Gilhuis *Vergunningen* 155.

<sup>100</sup> Gilhuis *Vergunningen* 155. In these instances the 'lower-ranking' authority assumes the function of a legal advisor to the competent authority. See further Van den Broek *et al* (eds) *Wet Milieubeheer in Bedrijf* 24.

<sup>101</sup> It should be noted in this regard that before the promulgation of the EMA, the competent authority for the removal of waste in terms of the SWPA, was the MHSPE. This competence currently lies with the provincial authority. It is however still required of the MHSPE to approve the removal of waste before the activity itself can be authorised by the provincial authority. Gilhuis *Vergunningen* 156, points out that integration in this instance actually led to more fragmentation, since authorisation and approval is now required by two authorities, instead of one as was the case under the SWPA. It should also be noted that the MHSPE has the competence to generally oversee authorisation activities, since section 8.27 of the EMA provides that the Minister may issue a directive to the relevant competent authorities in respect of decisions to grant an authorisation. See further in this regard, Gilhuis *Vergunningen* 156-157.

<sup>102</sup> Gilhuis *Vergunningen* 155, and Van den Broek *et al* (eds) *Wet Milieubeheer in Bedrijf* 23.

<sup>103</sup> There is no correlating English word for 'baggerspecie'. It may however be explained in English as "deposition of polluted sediments from dredging". See in this regard Rijksinstituut voor Volksgezondheid <http://www.rivm.nl/bibliotheek/rapporten/733007007.html>.

<sup>104</sup> Appendix IV of the EL Decree. See also Gilhuis *Vergunningen* 155, and Van den Broek *et al* (eds) *Wet Milieubeheer in Bedrijf* 24.

by way of a detailed form, and should thus be in writing. All required information to be submitted by the applicant in the authorisation application form, is set out in the EL Decree.<sup>105</sup> The authorisation application constitutes the basis of the authorisation and the question whether to grant or refuse the authorisation must accordingly be based squarely on the information provided for in the application.<sup>106</sup> There are three categories of information to be included. The first category relates to general information required for all installations.<sup>107</sup> The second category sets out information required of certain installations where it is specifically indicated as such.<sup>108</sup> The last category of information relates to additional information required from certain installations.<sup>109</sup> The information to be contained in the application includes, amongst others: the location of the installation; description of activities; possible polluting effects of activities and preventive and remediation measures; a soil quality report; information on possible environmental pollution due to extraordinary circumstances; and information on waste products.<sup>110</sup>

#### 6.4.5 *The decision to grant or refuse an authorisation*

After the competent authority has received the authorisation application, it must proceed to evaluate whether to grant or refuse the application.<sup>111</sup> Section 8.10 of the EMA provides that an authorisation may only be refused if it is in the interest of protecting the environment.<sup>112</sup> This necessitates an interpretation of 'in the interest of protecting the environment', and hence, requires a balancing of interests by the relevant competent authority. In determining the foregoing it is necessary to establish

<sup>105</sup> Uylenburg 2003 *Milieu & Recht* 1. See also Klijnstra *Openbaarheid in het Milieurecht* 171-189, for a discussion on the nature of information to be provided by the applicant, as well as the information to which interested and affected parties may have access to during the decision-making procedure.

<sup>106</sup> Gilhuis *Vergunningen* 157.

<sup>107</sup> Section 5.1 of the EMA. This may include information relating to, *inter alia*, the location of the installation and a description of the activities of the installation. See further Gilhuis *Vergunningen* 157, and Van den Broek *et al* (eds) *Wet Milieubeheer in Bedrijf* 28-29.

<sup>108</sup> Sections 5.4 to 5.6 of the EMA. Examples of this category of information include, *inter alia*, reports on the quality of the soil and reports on the potential environmental damage during unforeseen accidents. See Gilhuis *Vergunningen* 157, and Van den Broek *et al* (eds) *Wet Milieubeheer in Bedrijf* 29.

<sup>109</sup> Section 5.8 of the EMA. An example of additional information which may be required includes, *inter alia*, information concerning possible action to be undertaken for the minimisation of damage to the environment due to the installation's activities. See Gilhuis *Vergunningen* 157, and Van den Broek *et al* (eds) *Wet Milieubeheer in Bedrijf* 29.

<sup>110</sup> Gilhuis *Vergunningen* 157.

<sup>111</sup> See for detailed discussion, Van den Broek *et al* (eds) *Wet Milieubeheer in Bedrijf* 30-32.

<sup>112</sup> Seerden and Heldeweg *Environmental Law in the Netherlands* 286, 295-296.

what effect the installation may have on the environment in terms of section 8.8.1 of the EMA<sup>113</sup> According to section 1.1.2, 'protection of the environment' and 'effect on the environment' should be understood to include removal of waste, use of energy and resources,<sup>114</sup> movement of people and goods to and from the installation, and activities aimed at improving the environment.<sup>115</sup> This wording provides for an ambitious application scope of the EMA authorisation.<sup>116</sup> This is specifically significant insofar as it supports the nature of the EMA authorisation as an integrated authorisation that should be applicable to as many activities and environmental media of an installation as possible.<sup>117</sup> Where granting the authorisation conflicts with the strict quality standards provided by section 8.8.3 of the EMA, or contravenes any other provision of the EMA, including provisions of other acts specified in section 8.13 of the EMA,<sup>118</sup> the authorisation should not be granted.<sup>119</sup>

Apart from these rather general grounds for refusal, section 8.8 further provides for more concrete aspects that must be considered by the relevant competent authority in its decision to grant an authorisation or not.<sup>120</sup> These aspects include, *inter alia*, the current state of the environment, the effect that the activities of the installation may have on the environment, future development of the area including future land-use objectives, external advice and opinions, the possibility to protect the environment,<sup>121</sup> existing environmental policy plans and reasonable quality standards,<sup>122</sup> and emission limit values.<sup>123</sup> The relevant competent authority may also take into account general

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<sup>113</sup> Gilhuis *Vergunningen* 158.

<sup>114</sup> See Mulder 1998 *Milieu & Recht* 174-180, for a discussion on the use of energy and its relationship with the EMA.

<sup>115</sup> Gilhuis *Vergunningen* 158. Jongma and Van't Lam *Milieuvergunning in Nederland* 13-14, argue that it may even be the case that future effects on the environment can be taken into account when considering whether to grant a authorisation or not. They also argue that there is a need for the inclusion of the definition of 'environment' in the EMA, which may contribute to a more precise and comprehensive delineation of what should be protected and what not. This may then also include aspects of human health, cultural heritage resources and the well-being of people. See for a comprehensive discussion on the indirect effects of activities on the environment, Jongma 1997 *Milieu & Recht* 271-278.

<sup>116</sup> Jongma and Van't Lam *Milieuvergunning in Nederland* 13, and Jongma 1997 *Milieu & Recht* 272.

<sup>117</sup> See for an in-depth discussion, Gilhuis *Vergunningen* 158-159.

<sup>118</sup> These acts include, amongst others: the MA, the NEA, the NNA, the GWA, the APA, the SWPA, the SPA, and the EHWA.

<sup>119</sup> Seerden and Heldeweg *Environmental Law in the Netherlands* 286.

<sup>120</sup> Seerden and Heldeweg *Environmental Law in the Netherlands* 286.

<sup>121</sup> Section 8.8.1.

<sup>122</sup> Section 8.8.2.

<sup>123</sup> Section 8.8.3. See also Seerden and Heldeweg *Environmental Law in the Netherlands* 286.

guidelines developed by, *inter alia*, the MHSPE, environmental agreements, and established jurisprudence developed by courts on the matter.<sup>124</sup>

Authorisations are generally valid for an undetermined period of time.<sup>125</sup> There are however exceptions to this general rule. Section 8.17 stipulates that an authorisation will be valid for five years in the following instances: if the installation is only temporary; if the relevant competent authority needs more time to adequately assess the effects of the installation and its activities on the environment; and if more time is needed for development of new production methods, processes and techniques. Certain installations dealing with waste are also entitled to an authorisation that is only valid for a period of ten years.<sup>126</sup> Where an installation is not completed and put into operation three years after the authorisation has been granted, the authorisation also lapses.<sup>127</sup>

Section 8.12 further provides for instances where an authorisation may be repealed or revised. Whilst revision of authorisations may only occur where it is in the interest of the environment,<sup>128</sup> authorisations may be repealed in those instances where the activities of the installation may have unacceptable negative effects on the environment.<sup>129</sup> These provisions place an additional obligation on the relevant competent authorities, since authorisation provisions must continually be assessed in order to determine their relevance and actuality.<sup>130</sup>

#### 6.4.6 Authorisation provisions

The EMA authorisation may contain limitations,<sup>131</sup> as well as provisions, which must be based on the ALARA principle.<sup>132</sup> This principle aims to either avoid, or where

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<sup>124</sup> Gilhuis *Vergunningen* 160-163.

<sup>125</sup> Gilhuis *Vergunningen* 170.

<sup>126</sup> Gilhuis *Vergunningen* 171.

<sup>127</sup> Section 8.18.

<sup>128</sup> Section 8.23.

<sup>129</sup> Section 8.25. Repeal and revision of an authorisation may be instituted by the relevant competent authority or on request of the operator of an installation. See further Gilhuis *Vergunningen* 171 and Seerden and Heldeweg *Environmental Law in the Netherlands* 285.

<sup>130</sup> Gilhuis *Vergunningen* 171.

<sup>131</sup> In terms of limitations, the competent authority grants less than what was applied for by the authorisation applicant. See Gilhuis *Vergunningen* 164.

not possible, keep pollution as low as reasonably achievable.<sup>133</sup> The principle is based on the provisions of section 8.11.3 of the EMA and applies to authorisations and accompanying provisions and limitations.<sup>134</sup> A contentious question is what the relationship is between the ALARA principle and the IPPC Directive principle of BAT.<sup>135</sup> Whilst some argue that the ALARA principle poses more stringent requirements than BAT, others are of the opinion that, in practice, the two principles lead to the same results and are thus similar in nature.<sup>136</sup> In the course of 2003 the EC however established that the ALARA principle does in fact not conform to the BAT requirements of the IPPC Directive.<sup>137</sup> This is also one of the motivating factors that urged the Dutch government to investigate new legislation that will more adequately conform to the IPPC Directive's requirements on BAT.<sup>138</sup> As has been stated above, this new legislation is currently in the process of being drafted.<sup>139</sup>

In general, authorisation provisions should set a certain standard for maximum emissions.<sup>140</sup> This may be done by way of provisions relating to the objective to be achieved through the authorisation, as well as provisions relating to methods on how to achieve the objective.<sup>141</sup> Although 'method-provisions' are in most instances applicable to smaller installations, both types of provisions may be used in a single authorisation.<sup>142</sup> It may however be preferable to utilise provisions pertaining to the

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<sup>132</sup> Section 8.11 of the EMA, Seerden and Heldeweg *Environmental Law in the Netherlands* 286, and Veltkamp *EG-milieurichtlijnen in Nederland* 232-237, 242-246. See also Jongma and Van't Lam *Milieuvergunning in Nederland* 22-23, for a discussion on the historical development of the ALARA principle.

<sup>133</sup> Drupsteen *Algemene Aspecten* 38. It should be noted that the specific nature of this principle is not clear. Nor has the substantive and procedural content of the principle been clearly determined. The relationship between the ALARA principle and that of, amongst others, BAT, and best practical means, is also unclear. Whilst the ALARA principle is arguable the best-known environmental principle in the Dutch environmental law framework, uncertainty remains with regard to the interpretation and application of this principle. It is, for example, unclear how economic considerations may play a role in determining the best possible environmental protection in terms of the principle. See for a detailed discussion, Van Gestel and Verschuuren 2000 *Milieu & Recht* 56-63. Jongma and Van't Lam *Milieuvergunning in Nederland* 25-26, state that guidance regarding interpretation of the ALARA principle may be sought from non-governmental entities, such as industrial experts. Future interpretations by the legislature and the judiciary may however contribute to clarify the issue.

<sup>134</sup> Drupsteen *Algemene Aspecten* 38., and Jongma and Van't Lam *Milieuvergunning in Nederland* 21.

<sup>135</sup> Drupsteen *Algemene Aspecten* 38, Gilhuis *Vergunningen* 164-165, Jongma *De IPPC-richtlijn* 67-71, Van Gestel and Verschuuren 2000 *Milieu & Recht* 59, chapter 3 and paragraph 6.2 above.

<sup>136</sup> Drupsteen *Algemene Aspecten* 38-39.

<sup>137</sup> Jongma and Van't Lam *Milieuvergunning in Nederland* 27, and Jongma *De IPPC-richtlijn* 67-71.

<sup>138</sup> Jongma and Van't Lam *Milieuvergunning in Nederland* 27, and Jongma *De IPPC-richtlijn* 67-71.

<sup>139</sup> Jongma *De IPPC-richtlijn* 67, and paragraph 6.2 above.

<sup>140</sup> Seerden and Heldeweg *Environmental Law in the Netherlands* 286-287.

<sup>141</sup> Section 8.12 of the EMA. See also Gilhuis *Vergunningen* 165.

<sup>142</sup> Gilhuis *Vergunningen* 165.



objectives to be achieved, since the nature of these provisions allows a greater degree of flexibility on the authorisation and the possibility to link and integrate the authorisation with other environmental management tools, such as environmental management plans and internal environmental protection strategies and plans of industry.<sup>143</sup>

Apart from the limitations and provisions discussed above, a number of additional provisions may also be provided for.<sup>144</sup> In terms of section 8.13 the competent authority may, for example, prescribe provisions of an organisational and administrative nature that relate to, amongst others, measurement, registration and reporting measures; the required technical competence of employees; and a duty to continually research less-polluting techniques.<sup>145</sup>

#### 6.4.7 *Coordination and alignment of some authorisation procedures*

It has already been pointed out that the EMA authorisation does not provide for a totally integrated authorisation system.<sup>146</sup> The authorisation under the SWPA has, for example, not been incorporated in the EMA authorisation.<sup>147</sup> One of the reasons for this is that the water pollution authorisation is regarded as too significant and important to be fully integrated with the EMA authorisation.<sup>148</sup> It is however required by sections 8.28-8.34 of the EMA, as well as sections 7.b.-7.d of the SWPA that, where there is an application for both these authorisations by a single installation, that the applications and decision-making procedures should be coordinated and aligned

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<sup>143</sup> Gilhuis *Vergunningen* 166, Seerden and Heldeweg *Environmental Law in the Netherlands* 286-287, and paragraph 6.7 below. It is stated in this regard that environmental management plans and internal environmental protection strategies and plans of industry may, as additional self-regulatory mechanisms, also contribute significantly to improve integration. See in this regard Evaluatiecommissie Wet Milieubeheer *Onderzoek Integrale Milieuvergunning* 21-23, and Houweling 1997 *Milieu & Recht* 279-280.

<sup>144</sup> These include, for example, provisions on financial security, organizational provisions, provisions regarding waste, and remediation provisions.

<sup>145</sup> In addition to section 8.13, section 8.14 provides for a further set of prescriptions that must be included in an authorisation for installations involved with removal of waste. See further Gilhuis *Vergunningen* 168. For a further discussion on the obligation to continually research and implement less polluting techniques, see Woldendorp 2003 *Milieu & Recht* 49-52.

<sup>146</sup> See paragraph 6.4.7 above. See also in this regard, Hardenberg and Van de Peppel 1997 *Milieu & Recht* 39, and Freriks and Peeters 1994 *Milieu & Recht* 194.

<sup>147</sup> Hardenberg and Van de Peppel 1997 *Milieu & Recht* 41. For a discussion on the historical context of integration initiatives relating to the EMA and the SWPA, see Biezeveld 1990 *Milieu & Recht* 231-240.

<sup>148</sup> Gilhuis *Vergunningen* 150.

(*afstemmingsregeling*).<sup>149</sup> Authorisation applications are, *inter alia*, required to be submitted at the same time to the relevant authorisation authorities.<sup>150</sup> Provisions on alignment also entail that the eventual decision on both applications be made known simultaneously and that the relevant authorities assist each other with regard to provision of information during the decision-making process.<sup>151</sup> There is also an obligation to align and coordinate building authorisations and the EMA authorisation.<sup>152</sup> Alignment and coordination includes: that the application for both authorisations be submitted simultaneously, or that the EMA authorisation application be submitted prior to the building authorisation; and that the building authorisation may only be issued if and when the EMA authorisation is issued.<sup>153</sup>

Coordination and alignment must be based on chapter 14 of the EMA that explicitly provides for coordination procedures. The provincial authority is the coordinating body in those instances where it is the competent authority.<sup>154</sup> Where the provincial authority is not the competent authority, relevant competent authorities may request the provincial authority to act as the coordinating body.<sup>155</sup> The provisions of section 14.1 are of a procedural and substantive nature. Procedurally speaking, coordination in terms of section 14 entails that various acts with regard to the authorisation

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<sup>149</sup> Section 8.28, Gilhuis and Verschuuren *Environmental Law* 367, Hardenberg and Van de Peppel 1997 *Milieu & Recht* 41-42, Gilhuis 1993 *Milieu & Recht* 93-94, Freriks and Peeters 1994 *Milieu & Recht* 194-204, Van den Broek *et al* (eds) *Wet Milieubeheer in Bedrijf* 32-37, and Michiels *Wet Milieubeheer* 48-51.

<sup>150</sup> Section 8.30.

<sup>151</sup> Section 14.2. Where these two authorisations should be considered together, and no agreement can be reached in this respect, the MHSPE or the provincial authority may issue a directive with regard to the content of the SWPA authorisation in an attempt to align the authorisations. See section 7.d of the SWPA and Gilhuis *Vergunningen* 172. Although the enabling legal framework exists for alignment, it is stated that it is a difficult matter to align these two authorisations in practice, since the content of the applicable legislation essentially differs. See further Gilhuis *Vergunningen* 172. See for a further discussion on the precise procedure to be followed, Freriks and Peeters 1994 *Milieu & Recht* 195-197.

<sup>152</sup> See in this regard sections 8.5 and 20.8 of the EMA, and sections 8 and 52 of the *Housing Act* of 1991 (*Woningwet*). See also Gilhuis 1988 *Milieu & Recht* 85, Gilhuis 1992 *Milieu & Recht* 65, Hardenberg and Van de Peppel 1997 *Milieu & Recht* 39-41, and Gilhuis 1993 *Milieu & Recht* 94.

<sup>153</sup> As is the case with the EMA authorisation and the SWPA authorisation, some criticism is raised against this alignment obligation. Most notable is the fact that there is no obligation on the authorities to withhold the granting of an authorisation where building activities do not coincide with the construction of the installation. See further in this regard, Gilhuis *Vergunningen* 173-174. It is furthermore envisaged that there will in future be an obligation to align the *Nature Conservation Act* of 1994 (*Natuurbeschermingswet*) authorisation and the EMA authorisation. See further Gilhuis *Vergunningen* 174.

<sup>154</sup> Sections 14.1.2- 14.1.3, Michiels *Procedures en Rechtsbescherming* 321, and Freriks and Peeters 1994 *Milieu & Recht* 204.

<sup>155</sup> Michiels *Procedures en Rechtsbescherming* 321.

procedure are executed simultaneously.<sup>156</sup> These pertain to acts executed during the application and granting stages, such as communication of decisions with regard to the authorisation procedure and synchronisation of dates where more than one authorisation application is received.<sup>157</sup> In a substantive sense, coordination entails, *inter alia*, that the provincial authority must ensure that the various competent authorities take into account the inter-relatedness of the various authorisation applications.<sup>158</sup> There is furthermore a legal duty in terms of section 14.4 on all relevant competent authorities and advisors involved with more than one authorisation application to collaborate with the provincial authority during coordination procedures.<sup>159</sup> These provisions conform to the IPPC Directive's requirements on procedural and substantive coordination and alignment.<sup>160</sup> The main rationale behind coordination and alignment of authorisation procedures seems to be that, without procedural coordination and alignment, no substantive and material integration can be achieved.<sup>161</sup> It is also meant to further integration efforts in terms of the EMA insofar as the current EMA provisions do not provide for 'ideal' integration.<sup>162</sup>

#### 6.4.8 Monitoring and post-decision follow-up through reporting

Chapter 12 of the EMA provides for monitoring and mandatory reporting. The reporting obligation rests on the public, or more specifically industry,<sup>163</sup> and relevant competent authorities.<sup>164</sup> With regard to reporting on the side of industry, it is required that the report contain information on at least the following aspects: environmental pollution or damage caused by the installation; means and methods employed to prevent or limit the pollution or damage; and all possible present and future developments with regard to the installation that may be relevant for the environment.<sup>165</sup>

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<sup>156</sup> Michiels *Procedures en Rechtsbescherming* 321.

<sup>157</sup> Section 14.3.

<sup>158</sup> Section 14.3 and Michiels *Procedures en Rechtsbescherming* 321.

<sup>159</sup> It should be noted in this regard that the jurisdiction, competence and mandates of the various competent authorities remain intact and are not substituted by the competence of the provincial authority. See in this regard Michiels *Procedures en Rechtsbescherming* 321.

<sup>160</sup> Jongma *De IPPC-richtlijn* 58-59, and chapter 3 above.

<sup>161</sup> Evaluatiecommissie Wet Milieubeheer *Onderzoek Integrale Milieuvergunning* 17.

<sup>162</sup> Hardenberg and Van de Peppel 1997 *Milieu & Recht* 39.

<sup>163</sup> Section 12.2. See further Seerden and Heldeweg *Public Environmental Law* 372.

<sup>164</sup> Section 12.4.

<sup>165</sup> Seerden and Heldeweg *Public Environmental Law* 372-373.

As far as reporting by competent authorities is concerned, the aim of this obligation is to ensure that the authority that issued the authorisation to the installation, or has laid down restrictions on the installation, shall have a proper and continual insight in the activities of the installation, so as to enable itself to re-evaluate the appropriateness of the provisions or restrictions in future.<sup>166</sup>

The overall aim of this reporting obligation is arguably to establish mechanisms to facilitate continual monitoring and post-decision follow-up. Non-compliance with these legislative provisions amounts to an offence where parties may incur administrative or penal liabilities.<sup>167</sup>

### **6.5 Relevant provisions of the General Administrative Law Act**

The *General Administrative Law Act* of 1994 (*Algemene wet bestuursrecht*) (hereafter the GALA), plays an important role as far as the authorisation procedure provided by Chapter 8 of the EMA is concerned.<sup>168</sup> It is noted in this regard that the GALA has caused a number of amendments to the EMA, especially those relating to procedures for granting authorisations and exemptions, which have been repealed almost in their entirety by the GALA.<sup>169</sup> Furthermore, an authorisation amounts to a 'decision' or a 'written administrative legal act' in terms of section 1.3 of the GALA.<sup>170</sup> The procedure for granting the EMA authorisation is therefore currently provided for in the GALA.<sup>171</sup> This procedure may be summarised as follows: the procedure commences with the authorisation application by the applicant; the relevant competent authority conducts the necessary research to establish the admissibility of the application; and a draft EMA authorisation is published for comments. Advice and comments are also sought at this stage from other authorities that may have an

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<sup>166</sup> Seerden and Heldeweg *Public Environmental Law* 373.

<sup>167</sup> Seerden and Heldeweg *Public Environmental Law* 373.

<sup>168</sup> See for a detailed discussion on the procedures in terms of the GALA and EMA, Tonnaer *Nederlandse Milieurecht* 658-666.

<sup>169</sup> Gilhuis and Verschuuren *Environmental Law* 366.

<sup>170</sup> Seerden and Heldeweg *Public Environmental Law* 374-375.

<sup>171</sup> Tonnaer *Nederlandse Milieurecht* 657-658. These provisions are complemented by additional provisions on the granting of authorisations in respectively the EMA and the EL Decree. See for example chapter 13 of the EMA. It should also be noted that each phase in the process is subject to strict time limits that are set by the relevant competent authority. See further Seerden and Heldeweg *Public Environmental Law* 376.

interest in the authorisation.<sup>172</sup> The competent authority is generally expected to issue a decision on the authorisation application within six months after it has been received. This period may however be extended by way of a written notice.<sup>173</sup>

The GALA also provides for the possibility of appeal against the decision.<sup>174</sup> Generally, appeals are usually directed firstly to the administrative body that was responsible for the promulgation of the act in terms of which the decision was taken. Only then may the appeal be lodged in the Administrative Section of the relevant District Court.<sup>175</sup> The appeal procedure however differs from the above as far as appeals against authorisation decisions in terms of the EMA are concerned, since the GALA allows for a direct appeal to the relevant court in these instances.<sup>176</sup>

In summary, the GALA currently contains most of the procedural provisions pertaining to granting of an authorisation. It further provides for a liberal set of provisions on public participation whereby anyone that has an interest in the authorisation procedure and outcome of the decision-making process, including the authorisation applicant, has a right to access to information; has the opportunity to raise objections; has a right to be heard by the competent authority; and has a right to approach a court when dissatisfied with the final decision.<sup>177</sup>

## 6.6 General rules

In addition to the EMA provisions on authorisations, the Act also provides for so-called general rules (*algemene regels*).<sup>178</sup> These general rules have developed in the wake of the deregulation movement that focused on lessening the dominance of the

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<sup>172</sup> Also see paragraph 6.4.3 above.

<sup>173</sup> The same procedure applies to those instances where the EMA Authorisation is withdrawn or amended. Seerden and Heldeweg *Public Environmental Law* 376.

<sup>174</sup> See for a comprehensive discussion, Seerden and Heldeweg *Public Environmental Law* 378-380.

<sup>175</sup> Seerden and Heldeweg *Public Environmental Law* 378.

<sup>176</sup> Section 7(1)(b) of the GALC.

<sup>177</sup> Gilhuis and Verschuuren *Environmental Law* 370.

<sup>178</sup> Jongma and Van't Lam *Milieuvergunning in Nederland* 11, Gilhuis 1993 *Milieu & Recht* 95-96, Van den Broek *et al* (eds) *Wet Milieubeheer in Bedrijf* 68-74, Teesing and Uylenburg *Toegang tot het Milieurecht* 131-134, and Verwoerd *Milieurecht* 157-161. See Van Gestel and Verschuuren 2000 *Milieu & Recht* 62, for a discussion on the relationship between the ALARA principle and general rules.

authorisation system and allowing for more self-regulation by industry.<sup>179</sup> Reasons for the development of general rules include: the notion that the very strict and overtly regulated authorisation system inhibited development and investment initiatives; the notion that discretion of competent authorities caused inequalities and unfair competition practices in the authorisation procedure; the fact that a great number of installations that were in need of an authorisation had to do without one; a concern that legal certainty was not promoted by the authorisation procedure; enforcement of authorisation provisions was conducted unsatisfactorily, or not done at all; and the fact that the administration could not keep up with processing authorisation applications.<sup>180</sup> There was clearly a need to establish certain general rules in terms of which unauthorised installations that cause little harm to the environment can now be grouped into homogenous groups and be authorised in terms of the conditions established in terms of the general rules.<sup>181</sup> These include, amongst others, bakeries, offices, shops, fuel stations, restaurants, bars, and certain farms.<sup>182</sup>

General rules have three variants including: general rules that replace authorisations (*algemene regels in plaats van vergunningplicht*), general rules that are applicable together with the authorisation obligation (*algemene regels naast vergunningplicht*), and so-called 'general rules on instruction' (*instructie-amvb's*).<sup>183</sup> In determining general rules, more or less the same criteria that apply when determining whether an installation should apply for an authorisation, are applicable.<sup>184</sup>

With regard to the first variant, section 8.40 of the EMA provides that general rules may in some instances replace individual authorisations.<sup>185</sup> This should be read together with section 8.1.2 of the EMA which states that if the installation belongs to a category to which a general rule may be issued in terms of section 8.40, an

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<sup>179</sup> See paragraph 6.3 above, and Veltkamp *EG-milieurichtlijnen in Nederland* 226.

<sup>180</sup> Seerden and Heldeweg *Public Environmental Law* 363 and Veltkamp *EG-milieurichtlijnen in Nederland* 225-232.

<sup>181</sup> Seerden and Heldeweg *Public Environmental Law* 363.

<sup>182</sup> Seerden and Heldeweg *Environmental Law in the Netherlands* 289.

<sup>183</sup> Gilhuis *Vergunningen* 175, and Seerden and Heldeweg *Public Environmental Law* 363-365.

<sup>184</sup> See paragraph 6.4 above, and Seerden and Heldeweg *Environmental Law in the Netherlands* 288. It is stated in this regard that a less stringent marginal test is used in determining whether the criteria have been met. See in this regard Gilhuis *Vergunningen* 175.

<sup>185</sup> Seerden and Heldeweg *Environmental Law in the Netherlands* 287.

authorisation is not required.<sup>186</sup> The rationale behind this provision lies in the requirement that the general rules must contain such a comprehensive set of prescriptions, that it is redundant to issue an individual authorisation.<sup>187</sup> This also entails that an individual assessment of an installation is unnecessary, and that it is sufficient if the applicant notifies the relevant authority if the installation in fact falls under the scope of application of the general rules.<sup>188</sup> This notification must take place before an installation is erected or before operations at the installation are changed, and must be made available also to the general public.<sup>189</sup> The general rules will only be applicable if the application conforms to all the criteria of the Decree. If the application does not conform to one of the criteria, it will still be subject to the obligation to obtain an EMA authorisation.<sup>190</sup> Section 8.42 further states that if a general rule explicitly so provides, the relevant competent authority may issue additional provisions alongside that of the general rule, thereby providing for more comprehensive environmental protection.<sup>191</sup>

The second variant of the general rules is provided for in section 8.44 of the EMA, and entails the situation where the general rules do not abolish the authorisation obligation.<sup>192</sup> These include situations where an authorisation is needed for, *inter alia*, dumping of waste and underground storage of substances in tanks.<sup>193</sup> In these instances, the general rules regulate only some aspects of a certain category of the installation, whereas the remainder of aspects are dealt with by the authorisation.<sup>194</sup> The general rules and the authorisation provisions are complementary in these instances.<sup>195</sup>

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<sup>186</sup> See further Seerden and Heldeweg *Environmental Law in the Netherlands* 288.

<sup>187</sup> Gilhuis *Vergunningen* 175.

<sup>188</sup> Gilhuis *Vergunningen* 175.

<sup>189</sup> Section 8.41 and Gilhuis *Vergunningen* 175 and Seerden and Heldeweg *Environmental Law in the Netherlands* 288.

<sup>190</sup> For new installations, this is directly applicable. For existing installations, a transition period will be applicable. See further Gilhuis *Vergunningen* 176.

<sup>191</sup> Seerden and Heldeweg *Environmental Law in the Netherlands* 289.

<sup>192</sup> Seerden and Heldeweg *Environmental Law in the Netherlands* 289.

<sup>193</sup> Gilhuis *Vergunningen* 177.

<sup>194</sup> Gilhuis *Vergunningen* 177.

<sup>195</sup> Seerden and Heldeweg *Environmental Law in the Netherlands* 289.

The third variant of the general rules are provided for by section 8.45 of the EMA and are referred to as 'general rules on instruction'.<sup>196</sup> Like the second variant, these rules are also applicable in those instances where the rules co-exist with the authorisation. These rules are however not directed to the applicant, but rather to the relevant competent authority, whereby the latter is obliged by way of the decree to prescribe certain provisions in the authorisation.<sup>197</sup> One of the advantages of these general rules is that the obligations on an installation may be included in a single document, namely that of the authorisation, whereby the possibility that the prescriptions in the general rules and the authorisation prescriptions contradict each other, does not arise.<sup>198</sup>

The expectant results of the establishment of the general rules include: that the authorisation procedure will be more time-efficient, that it will lessen the burden on the administration; and that it will provide for greater efficiency in the investment and development process.<sup>199</sup> General rules as a method of regulation, resulted in a situation where in 1999, around 300 000 of the 400 000 installations in need of authorisation, fell under the ambit of the general rules and consequently did not need an authorisation.<sup>200</sup> There is currently a move towards a more flexible approach with regard to general rules whereby the rules are less detailed, they allow more freedom for self-regulation, they use more prescriptions that are aimed at the achievement of specific general objectives, and procedures for incorporation and alignment of general rules where possible.<sup>201</sup> It is stated that the general rules as a mechanism of authorisation, may be a useful tool to lessen the administrative burden on authorities and industry alike, thereby providing for a more streamlined and efficient authorisation system.<sup>202</sup> General rules may accordingly also enable competent

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<sup>196</sup> Seerden and Heldeweg *Environmental Law in the Netherlands* 289.

<sup>197</sup> Gilhuis *Vergunningen* 178.

<sup>198</sup> Gilhuis *Vergunningen* 178.

<sup>199</sup> Although the theoretical framework for general rules has been established and implemented in terms of the EMA, evidence suggests that some installations still need additional regulation by way of, for example, authorisation conditions. It is however projected that 75-80% of installations in need of authorisation, will be brought under the ambit of the general rules in due course. See further in this regard Seerden and Heldeweg *Public Environmental Law* 363.

<sup>200</sup> Gilhuis *Vergunningen* 176, and Verschuuren 1996 *Nederlandse Juristenblad* 1350.

<sup>201</sup> Gilhuis *Vergunningen* 176, and Veltkamp *EG-milieurichtlijnen in Nederland* 226.

<sup>202</sup> General rules also pose some disadvantages including, amongst others, the fact that they do not allow adequate input from third parties and that they negate individual assessment of installations because of their general nature. See further Gilhuis *Vergunningen* 177. With regard to public participation, section 21.6 of the EMA however provides that the public may give inputs on the concept of a general rule. It also allows for consultation with one or more advisory bodies. See further Seerden and Heldeweg *Environmental Law in the Netherlands* 288.



authorities to focus more on enforcement, they provide legal certainty and uniformity, and competent authorities may address imbalances in authorisation provisions that may negatively affect the competitiveness of industry.<sup>203</sup>

### 6.7 *Towards a more flexible authorisation*

Apart from general rules, there are currently several initiatives to facilitate a more flexible authorisation.<sup>204</sup> These essentially refer to those instances where it is possible to integrate the EMA authorisation with other environmental management tools, such as environmental management plans (*bedrijfsmilieuplan*) and internal environmental protection systems and plans of industry (*milieuzorgsysteem*).<sup>205</sup> Backes<sup>206</sup> points out that 'flexibility' in this sense, means that the EMA authorisation itself should contain less provisions and detail, provided that the authorisation applicant ensures that it concretises the relevant provisions that are set out in the authorisation by way of, for example, an environmental management plan. One should thus rather speak of a 'connection' between internal procedures and external authorisation provisions, rather than a flexible authorisation.<sup>207</sup>

An initiative aimed at establishing a more flexible authorisation, is the so-called general authorisation (*vergunning op hoofdzaken*) that allows for a greater degree of self-regulation within generally formulated legal parameters.<sup>208</sup> The general authorisation also allows industry to facilitate integrated consideration of the various

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<sup>203</sup> Seerden and Heldeweg *Environmental Law in the Netherlands* 287.

<sup>204</sup> See Waqué *Flexibele Vergunning in de Praktijk* 39-47, for a comprehensive discussion on the flexible authorisation in practice. For a discussion on the enforcement of the flexible authorisation in respectively administrative and criminal law spheres, see Hulshof *Bestuursrechtelijk Perspectief* 49-55; and Biezeveld *Strafrechtelijk Perspectief* 57-65.

<sup>205</sup> Backes *Flexibele Vergunning* 24.

<sup>206</sup> Backes *Flexibele Vergunning* 24.

<sup>207</sup> Backes *Flexibele Vergunning* 24.

<sup>208</sup> Van der Plank 2002 *Milieu & Recht* 240, and Van den Heuvel *Milieubeleid voor Bedrijven* 14-18. See also Verschuuren 1996 *Nederlandse Juristenblad* 1349-1352, for a discussion on the need for a more flexible authorisation approach. The practical implementation of the general authorisation has recently been evaluated. A detailed discussion falls outside the scope of this study. By way of summary, it has been proposed by the evaluation commission that amendment of the EMA may provided greater clarity with regard to aspects relating to, amongst others: definition of key concepts; the application procedure regarding the general authorisation; codification of testing criteria; the relationship between the general authorisation and the ALARA principle; the relevant provisions that should be contained in the authorisation; and aspects relating to enforcement of the general authorisation. See for a detailed discussion Evaluatiecommissie Wet Milieubeheer *Vergunning op Hoofdsaken* 1-42.

environmental media and the effects of pollution on the media themselves, instead of having to leave it solely to government.<sup>209</sup> It provides for, amongst others, material flexibility whereby industry may determine themselves how environmental goals are to be achieved; and procedural flexibility whereby additional and unnecessary administrative procedures are eliminated.<sup>210</sup> The rationale behind the general authorisation is thus the opportunity for flexibility and lessening of unnecessary details, procedures and provisions which may place unnecessary and additional administrative burdens on the authorisation applicant and the relevant competent authority.<sup>211</sup> This authorisation is however only applicable to industries with a proven record of exceptional environmental protection standards and practices.<sup>212</sup> The general authorisation only contains the minimum basic prescriptions and norms to which an installation must conform, including, *inter alia*, objectives; duty-of-care requirements; and measurement, reporting and registration requirements.<sup>213</sup> When applying for a general authorisation, the authorisation applicant must indicate the environmental goals that it set for itself.<sup>214</sup> It is especially in this instance where the environmental management plan and environmental care system of the industry may play an important informative and guiding role.<sup>215</sup>

With regard to a more flexible approach aimed at lessening the administrative burden on both the authorisation applicant and the relevant competent authority, a novel system has been introduced whereby the authorisation holder must only inform the relevant competent authority of any changes in the installation which do not have a significant impact on the environment.<sup>216</sup> These are referred to as 'environmental-

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<sup>209</sup> Evaluatiecommissie Wet Milieubeheer *Onderzoek Integrale Milieuvergunning* 25.

<sup>210</sup> Graven and Schakel 1999 *Milieu & Recht* 160-161.

<sup>211</sup> Graven and Schakel 1999 *Milieu & Recht* 160-161.

<sup>212</sup> Gilhuis *Vergunningen* 166, and Graven and Schakel 1999 *Milieu & Recht* 160-161. Installations that may qualify must, for example, have an ISO 14001 environmental management system in place. See further Freriks and Kniff 2003 *Milieu & Recht* 4. Although there is still some uncertainty with regard to the actual functioning of the general authorisation and specifically the desirable balance between legal certainty and flexibility, it is generally accepted that the general authorisation may contribute to streamlining and integrating the various authorisation requirements and other environmental management tools. See in this regard Evaluatiecommissie Wet Milieubeheer *Onderzoek Integrale Milieuvergunning* 23-24.

<sup>213</sup> Gilhuis *Vergunningen* 166.

<sup>214</sup> Van den Heuvel *Milieubeleid voor Bedrijven* 15.

<sup>215</sup> Van den Heuvel *Milieubeleid voor Bedrijven* 15-16.

<sup>216</sup> Section 8.19 of the EMA. See also for a further discussion, Alders 1999 *Milieu & Recht* 222-224, and Van den Heuvel *Milieubeleid voor Bedrijven* 19-20.

friendly' changes (*milieuvriendelijk wijzigingen*).<sup>217</sup> In these instances, the authorisation holder does not need to re-authorise the change.<sup>218</sup> In order to qualify for this procedure in terms of section 8.19 of the EMA, it is required that the change must still resort under the provisions of the original authorisation.<sup>219</sup> The proposed changes must also not have a negative effect on the nature and scope of effects on the environment; and it must only lead to positive effects on the environment.<sup>220</sup> Notice must be given to the relevant competent authority at least a month before the proposed changes are realised.

A further development towards a more flexible approach is the so-called 'cover', or 'umbrella', authorisation (*stolpvergunning*). The development of this type of authorisation must be viewed in light of critique that the linkage between the EMA authorisation and the installation is too fixed, thereby negating the development of a more flexible approach to authorisations.<sup>221</sup> An umbrella authorisation is defined as an authorisation for a certain area or industrial terrain where the environmental area has been predetermined.<sup>222</sup> This means that only one authorisation is necessary for a large business that consists of various factories or legally independent units that are situated in a single business area.<sup>223</sup> In effect, the umbrella authorisation obviates various individual authorisations for a single business that carries out different industrial activities.<sup>224</sup> The practical consequences of regulation by way of this authorisation include: more flexibility by way of the creation of a single 'environmental utilisation space' (*milieugebruiksruimte*), where emissions are traded between the various units of a business; a simplified process for authorisation of changes to the various business units; improved co-operation between the various business units in terms of achieving better environmental profits; and a reduction of administrative burdens on industry and relevant competent authorities.<sup>225</sup>

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<sup>217</sup> Van den Broek *et al* (eds) *Wet Milieubeheer in Bedrijf* 17.

<sup>218</sup> Teekens 2000 *Milieu & Recht* 1, and Van der Plank 2002 *Milieu & Recht* 240-241.

<sup>219</sup> Teekens 2000 *Milieu & Recht* 1, and Van der Plank 2002 *Milieu & Recht* 240-241.

<sup>220</sup> Van den Broek *et al* (eds) *Wet Milieubeheer in Bedrijf* 17.

<sup>221</sup> Uylenburg 1999 *Milieu & Recht* 264.

<sup>222</sup> Uylenburg 1999 *Milieu & Recht* 264.

<sup>223</sup> Uylenburg 1999 *Milieu & Recht* 264.

<sup>224</sup> An example where this authorisation has been employed, is Schiphol International Airport in Amsterdam.

<sup>225</sup> Uylenburg 1999 *Milieu & Recht* 264.

## **6.8 Summary and conclusions**

### *6.8.1 The relationship between the IPPC Directive and the EMA*

Although the enactment of the EMA preceded the IPPC Directive, the EMA is based on the provisions of the Directive. Chapter 8 of the EMA is deemed to encapsulate all, or at least most of the provisions and requirements of the IPPC Directive. The general view is that the EMA largely corresponds with the Directive, and in some instances even surpasses the requirements of the Directive. Some uncertainties however remain with regard to certain issues, including amongst others, the relationship between the Directive's BAT requirement and the EMA's ALARA principle. In light of these concerns, the Dutch government is in the process of drafting new legislation that will fully comply with the IPPC Directive. Such an endeavour may more closely resemble the Finnish EPA, which arguably incorporated the Directive's provisions in a more comprehensive fashion.

### *6.8.2 The previous fragmented environmental governance regime*

Before 1993, the environmental governance regime in the Netherlands was characterised by fragmentation. This fragmented regime included various sectoral acts, various environmental authorisation processes and procedures that emanated from the acts, and various authorities responsible for regulation in terms of this fragmented legislative framework. Some attempts were made to integrate the fragmented framework by way of procedural integration in terms of the GPEHA, and some self-regulatory initiatives. These initiatives did however not comprehensively address substantive integration of various acts, administrative tasks and environmental media. It was only with the enactment of the EMA that more comprehensive internal and external integration was achieved. Internal integration is specifically significant for the purpose of this study since it relates to the establishment of uniform procedures, simplification of relationships between different environmental acts, creation of integrated administrative structures, and simplification of jurisdictions.

### 6.8.3 *The provisions of the EMA*

The EMA currently acts as centrepiece legislation that regulates a more integrated approach to environmental governance. The EMA integrated various acts and authorisation procedures by way of incorporation. Chapter 8 of the EMA contains provisions relating to the integrated EMA authorisation. Although the EMA is referred to as an integrated act, it does not provide for total integration, since some aspects are still regulated by sectoral legislation, such as the SWPA. Despite a movement to a more flexible approach and inclusion of other regulatory environmental management and governance tools, environmental authorisations remain an important regulatory instrument in the Netherlands. The EMA provides for three different types of authorisation that are widely applicable. The wide application scope may be attributed to the comprehensive definition of 'environment' in terms of the EMA.

#### 6.8.3.1 The installation and its obligation to authorise

There is an obligation on installations in terms of the EMA to obtain an authorisation. The EMA sets out detailed provisions with regard to possible categories of industries that need to obtain an authorisation. 'Installation' is widely defined in the EMA and includes as many potential polluting industries as possible. This may be particularly beneficial in terms of widening the scope of environmental protection. The EL Decree further sets out specific categories of installations that need to obtain an authorisation.

#### 6.8.3.2 The relevant competent authority

Provisions on the relevant competent authority are clearly detailed in the EMA and the EL Decree. The competent authority will in most instances be the local authority, whilst the provincial authority will be the competent authority where the activities of the installation may possibly lead to more severe detrimental impacts on the environment. In some exceptional instances, other ministries, including the MEA, the MTW, and the MHSPE, may also act as the competent authority.

#### 6.8.3.3 The authorisation application procedure

The application for an authorisation forms the basis of the authorisation procedure. The EMA and the EL Decree clearly set out the relevant information that needs to be included in the application. This information includes, amongst others, the location of the installation and a description of the activities of the installation; reports on the quality of the soil, or reports on the potential environmental damage during unforeseen accidents, and information concerning possible action to be undertaken for the minimisation of damage to the environment due to the installation's activities.

#### 6.8.3.4 The decision to grant or refuse an authorisation

The EMA provides specific criteria to both the competent authority and the authorisation applicant for granting or refusing an authorisation. It is specifically provided that an authorisation may be refused if it is in the interest of the environment. These criteria are broadly formulated and provide for a comprehensive set of aspects that need to be considered and evaluated before an authorisation is granted. This may arguably contribute to a high level of environmental protection. Detailed provisions are also set out in the EMA that relate to the period of validity of authorisations. Authorisations may also be repealed or revised in some instances, including, amongst others: where it is in the interest of the environment, and where the activities of the installation may have unacceptable negative effects on the environment. These provisions make it incumbent on the competent authority to continually assess the activities of the installation, as well as the actuality and requirements of authorisations.

#### 6.8.3.5 Authorisation provisions

The relevant competent authority must prescribe certain provisions and limitations in an authorisation. These provisions and limitations must be based on the ALARA principle, in terms of which pollution must be avoided, or kept as low as reasonably possible. The nature and content of the ALARA principle are currently under revision, and will be amended in future to more adequately conform to the IPPC Directive's pollution standard of BAT. The EMA clearly sets out certain

considerations that must be taken into account by the relevant competent authority in prescribing limitations and other authorisation provisions. Apart from general limitations and provisions, the competent authority may also prescribe additional provisions relating to, *inter alia*: organisational and administrative aspects; measurement, registration and reporting activities; and the required technical competence of employees. Generally speaking, provisions and limitations may relate to certain environmental objectives to be achieved, as well as methods on how to achieve the objectives.

#### 6.8.3.6 Coordination and alignment of some authorisation procedures

The EMA authorisation does not provide for total integration. Certain authorisations are still regulated by other sectoral acts. The EMA does however provide for coordination and alignment procedures in those instances where authorisations in terms of the SWPA and the *Housing Act* of 1991 need to be considered simultaneously with the EMA authorisation. Coordination and alignment procedures are based on chapter 14 of the EMA and entails, amongst others, that various acts with regard to the authorisation procedure are executed simultaneously. It also provides for coordinated communication of decisions with regard to the authorisation procedure; synchronisation of dates where more than one authorisation application is received; and that authorities should take into account the inter-relatedness of the various authorisation applications. Coordination and alignment of authorisation procedures aim to achieve substantive integration through procedural integration strategies. It is also meant to enhance integration efforts since the current EMA provisions do not provide for 'ideal' or total integration.

#### 6.8.3.7 Monitoring and post-decision follow-up through reporting

The EMA specifically provides for continual assessment of the activities of an installation by way of obligatory monitoring and reporting requirements. It is required of operators of an installation to monitor activities and report on them to the competent authority. There is also a reciprocal obligation on the relevant competent authority to continually monitor and update authorisation provisions in order to

comply with changing circumstances. These provisions aim to facilitate a comprehensive procedure for post-decision follow-up through monitoring activities.

#### *6.8.4 Relevant provisions of the General Administrative Law Act*

Whilst the EMA provides for some aspects relating to the administrative decision-making procedure in terms of authorisations, the GALA contains the bulk of provisions relating to this aspect. Apart from providing for a specific and detailed decision-making procedure, the GALA also provides for appeal procedures and broad public participation measures. One of the aims of the GALA is to subject decision-making procedures by the relevant competent authority to the general administrative law rules. It also aims to enhance transparency and public involvement in decision-making.

#### *6.8.5 General rules*

The development of general rules must be seen in light of current deregulation initiatives in the Netherlands. General rules are applicable to installations that cause little harm to the environment. In practice it means that these installations can now be grouped into homogenous groups and authorised in terms of the conditions established in terms of the general rules. General rules therefore make it unnecessary to follow the usual burdensome authorisation application procedure, and thereby they lessen the administrative burden on both the competent authority and the authorisation applicant. It is also meant to streamline the detailed authorisation procedure that will normally be applicable.

#### *6.8.6 Towards a more flexible authorisation*

There are currently several initiatives to facilitate a more flexible authorisation. 'Flexibility' in this sense means that less detailed provisions are provided in the authorisation; that more activities may be authorised under one authorisation; that the administrative burden on competent authorities and authorisation applicants are lessened; and that a more streamlined and efficient authorisation system is provided. Mechanisms for greater flexibility include: the general authorisation, authorisations



for environmentally-friendly changes to installations, and the umbrella authorisation. These mechanisms will however only be available to those applicants who have a proven record of exceptional environmental compliance.

## **7. SUMMARY AND RECOMMENDATIONS**

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## **Chapter 7: Summary and recommendations**

### **7.1 Background**

The environmental governance sphere in South Africa is fragmented. This fragmentation is exacerbated in the provinces. Fragmentation manifests in various ways, including, *inter alia*, structural fragmentation between the various spheres and line functions of government, fragmented environmental legislation which is silo-based and issue-specific, jurisdictional overlaps, and duplication of procedures and processes. Fragmentation poses several disadvantages and may ultimately hamper effective and sustainable service-delivery by government. Governance in the 21<sup>st</sup> century in South Africa faces serious challenges in terms of improvement of service-delivery efforts. This thesis argues that integration of the environmental governance regime should be a central consideration in efforts to improve service-delivery and optimise current unsustainable governance practices. The principal objective of this thesis was accordingly to investigate possible solutions to address fragmentation and to propose a more sustainable strategy to achieve integration of currently fragmented environmental governance efforts in South Africa and the NWP.

### **7.2 Definitions**

A number of key concepts had to be defined for the purpose of this study. The following definitions underpin the theoretical framework and main design of this study:

An environmental authorisation may be defined as a written order, document or certificate that is issued by a competent authority to an applicant to grant the applicant permission to perform certain acts or activities that may have an impact on the environment. The authorisation is one of the principal instruments utilised in the 'command and control' regulatory approach.<sup>1</sup>

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<sup>1</sup> See paragraph 1.1 above.

Sustainability means the ability to maintain a desired condition over time without eroding natural, social and financial resource bases, through a process of continual improvement in the form of sustainable development. Sustainability also relates to the integration of various considerations, including: the environment, the economy, social factors, environmental governance and management efforts, and public and industry involvement. Sustainable results may be achieved through the application and implementation of the various principles of sustainability and continual monitoring and post-decision follow-up of the results of these efforts.<sup>2</sup>

Fragmentation in terms of environmental governance efforts may be defined as including: disjointed governance structures along separate, autonomous line functioning organs of state that operate at national, provincial and local spheres of government; fragmented governance processes that culminate in fragmented policies; disjointed legislation that emanates from separate policy processes; separate organs of state that are organised to either focus on specific environmental media, or to address individual and sectoral-based issues; disjointed and incremental governance processes that are fundamentally inefficient, with significant duplication and overlap of both governance mandates and adoption and use of governance tools, including environmental authorisations; as well as structural fragmentation of environmental governance regimes including fragmentation at different spheres, each with several autonomous line functionaries.<sup>3</sup>

Bureaucracy and administrative behaviour contribute to fragmentation and explain unacceptable human behaviour in organisational context with a focus on individual and group processes and actions. It involves an exploration of organisational and managerial processes in the dynamic context of the organisation and is primarily concerned with the human implications of such activity. It may also result in fragmentary growth of institutionally separate and exclusive venues, which contributes to, and exacerbates fragmented governance regimes. Various factors may influence organisational and bureaucratic behaviour, including, *inter alia*: turf protection, bureaucracy, irrational decision-making and factors inherent to the administrative system of developing countries. Under these conditions, coordination,

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<sup>2</sup> See paragraph 2.2.2 above.

<sup>3</sup> See paragraph 2.3 above.

co-operation, comprehensive control, and holistic planning may be essential to address fragmentation.<sup>4</sup>

Integrated, or holistic governance, is the ideal form of governance, which is established by way of collaboration, coordination, co-operation and integration of policies, regulation, service provision and scrutiny or assessment functions of co-existing governmental organs into a single system of government, in order to achieve sustainable results. Integrated governance includes elements of both procedural (at the operational level of government) and substantive integration (at the policy level of government).<sup>5</sup>

IEM means integrated management of activities at the governance level. IEM may be defined more comprehensively as the management of the activities of people to ensure the achievement of the principles of sustainability. The main objective of this specific management paradigm is to ensure the utilisation of natural resources provided by all environmental media within their carrying capacities, while promoting economic growth as primary objective. It also aims to ensure the implementation of decision-making and management tools for environmental management, based on the Deming-management approach, for the different phases of the project life-cycle through the integration of the activities between the different spheres of government; and within their various line functions.<sup>6</sup>

CEG means the integration of the different spheres of government and line functionaries at international, intra-regional and intra-governmental level; co-operation between individual government officials in each sphere/line functionary; co-operation between government officials in different spheres/line functionaries; integration of policy, regulation methods and tools, service provision and scrutiny; and co-operation with industry and the public in order to achieve the principles of sustainability.<sup>7</sup>

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<sup>4</sup> See paragraph 2.4 above.

<sup>5</sup> See paragraph 2.5.1 above.

<sup>6</sup> See paragraph 2.6 above.

<sup>7</sup> See paragraph 2.7 above.

IPPC may be defined as a holistic regulatory regime that employs technology-based pollution standards, with the main objective to control industrial pollution through an integrated authorisation procedure and a centralised, or fully co-ordinated administration, by having regard to all emissions from an industrial installation to all environmental media in a coherent, holistic, inter-related and inter-dependent fashion.<sup>8</sup>

These definitions underpin the following comparative analysis and main findings.

### **7.3 *Comparative analysis and main findings***

#### **7.3.1 *Sustainability as the ultimate objective of integration endeavours***

Sustainable development is a concept which is well-established in international, regional and national environmental law frameworks.<sup>9</sup> The precise meaning and practical application of the concept is however not sufficiently clear. Whilst the South African and European legal orders endorse this concept, it is argued that a more precise and practical alternative is required.<sup>10</sup> This alternative presents itself in the form of the concept of sustainability as defined above.<sup>11</sup> The concept requires the creation of inter-, and intra-generational equality which may be achieved through a process of continual improvement alongside the various principles of sustainability. The principles of sustainability include, *inter alia*, the notion that environmental governance and management must be holistic and integrated.

The achievement of sustainable results should be one of the primary objectives of environmental governance efforts. This ideal is enumerated in the South African, European, Finnish and Dutch environmental law systems.<sup>12</sup> It is thus argued that integration of environmental governance efforts may be one of the ways by which to achieve sustainable environmental governance results. It is, for example, clear that the main purport of the IPPC Directive and the Finnish and Dutch environmental law

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<sup>8</sup> See paragraph 2.8 above.

<sup>9</sup> See chapter 2 above.

<sup>10</sup> See paragraph 2.2 and chapters 4-6 above.

<sup>11</sup> See paragraph 7.2 above.

<sup>12</sup> See respectively paragraphs 2.2, and chapters 3-6 above.

regimes, is to ensure a high level of environmental protection, with the ultimate aim to achieve sustainable environmental governance results through an integrated approach.<sup>13</sup> Historic developments at EU level further suggest that fragmented approaches to environmental governance may not have been sustainable.<sup>14</sup> Moreover, it has been established that current fragmentation of the domestic regime, may also not be conducive for sustainable service-delivery practices.<sup>15</sup> It may be derived from this exposition that the ideal of sustainable environmental governance results is not foreign to the South African and European legal orders. Whilst the achievement of the ideal of sustainability is endorsed in South African law, this ideal may however not be attained because of fragmentation of governance efforts. Moreover, the principal objective of integration efforts should arguably be focused on the achievement of sustainable service-delivery by environmental governance bodies.

### *7.3.2 Fragmentation of environmental governance efforts*

Fragmentation of environmental governance regimes is a concern in South Africa, the NWP, Finland and the Netherlands.

Fragmentation presents itself in South Africa and the NWP in terms of structural fragmentation between the various spheres of government and the various line functionaries in each sphere. Structural fragmentation accordingly manifests in a vertical (between the different spheres) and horizontal (between the various line functionaries) sense. Environmental legislation is also fragmented, since the legislative framework consists of a multitude of acts which are silo-based and environmental-media specific. The result is that land use and planning, pollution control, heritage resources, marine resources, biodiversity, EIA, minerals and energy, water resources and air quality, are all regulated by different acts which provide for different competent authorities and a multitude of procedures and processes. This is especially observed in terms of the various environmental authorisation procedures that are prescribed by these acts. This matrix framework of fragmented legislation further gives rise to duplication of administrative procedures, jurisdictional overlap,

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<sup>13</sup> See chapters 4-6 above.

<sup>14</sup> See chapters 4-6 above.

<sup>15</sup> See chapter 3 above.

and a time consuming and confusing governance effort. Results from an empirical study further suggest that unco-operative organisational behaviour in the ranks of environmental authorities exacerbate the negative effects of fragmentation. The results of this fragmentation and unco-operative organisational behaviour cause environmental governance efforts to be unsustainable.

Fragmentation is also evident in the European environmental governance regimes. This contention may be based on the specific challenges that the IPPC Directive essentially aims to address.<sup>16</sup> One of the primary aims of the IPPC Directive is to address fragmentation, especially insofar as it exists in diffuse and fragmented pollution prevention and control regimes in the EU. The establishment of the Directive must be considered in the context of modern EU environmental law policies that advocate a more integrated approach to environmental governance. Fragmentation in terms of the IPPC Directive refers to approaches to pollution prevention and control that regulate environmental media (land, air and water) in a fragmented fashion. The consequence is that pollutants are merely shifted between the different media instead of addressing the results of pollution in an integrated and holistic fashion by way of horizontal legislation and control measures that simultaneously apply to air, land and water. The fragmentation that the Directive further aims to address include: fragmented and environmental media-specific environmental legislation; fragmented and sectoral approaches that emanate from, *inter alia*, separate authorisations administered by separate administrative organs; different procedures for different authorisations; varying standards of control for each authorisation; different procedures for obtaining authorisations; and dissimilar powers and competencies for enforcing authorisation conditions.

Current integration efforts in Finland are a direct result of a fragmented environmental governance regime.<sup>17</sup> The past approach to environmental governance in Finland was characterised by fragmentation at both the policy and operational levels of government. Fragmentation at policy level is evident from the various sectoral acts that covered a vast amount of environmental sectors. These acts were to a large extent sector-, or environmental-media specific. This resulted in a fragmented legal

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<sup>16</sup> See chapter 4 above.

<sup>17</sup> See chapter 5 above.



framework and a fragmented regulatory approach to environmental governance. Fragmentation at policy level resulted in fragmentation at operational level. Various separate authorisation procedures were prescribed in terms of legislation with no internal coordination. It is also noted that these fragmented policies and processes were executed by a fragmented environmental administration regime. This resulted in a fragmented, discontinuous and circumstantial environmental governance framework, especially insofar as environmental authorisation structures and processes are concerned.

The situation in the Netherlands corresponds with that in Finland as far as fragmentation is concerned. Until 1993, the environmental governance framework in the Netherlands was severely fragmented.<sup>18</sup> It consisted of a number of media-specific and sectoral environmental acts. A multitude of authorisations were also provided in terms of these acts. The fragmented authorisation system placed an onerous administrative burden on the environmental administration and authorisation applicants because of the multitude of detailed conditions and requirements. It also became clear that authorisation applicants would have to apply for a number of different authorisations that are subject to various different authorisation procedures regulated by different administrative bodies. Moreover, technical differences in regulation resulted in confusion for administrative bodies, authorisation applicants, and other interested parties; uncertainty arose with regard to mandates as well as with regard to which act covered which activity; and the sectoral approach ultimately hampered an integrated approach to different forms of pollution from a single industrial installation. Apart from fragmentation at policy level, fragmentation was also evident in terms of the administrative structure. Responsibility for environmental regulation was, for example, divided between five different ministries and various authorities in the different spheres of government.

It is evident from the foregoing that fragmentation of environmental governance regimes is a concern in all of the three jurisdictions investigated for the purpose of this study. The generic elements of fragmentation, which are common to all the jurisdictions, include: environmental media-specific and sectoral environmental acts;

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<sup>18</sup> See chapter 6 above.

fragmented administrative structures because of the existence of various environmental authorities that are responsible for environmental governance; lack of coordination and co-operation in the environmental administration; fragmented use of environmental governance tools, and lack of integration of environmental authorisations and other regulatory tools such as land use planning tools and internal environmental management systems; fragmentation at the operational level of government, especially insofar as pollution regulation through environmental authorisation systems is concerned; fragmentation at the policy level, which may be attributed to the existence of various governance policies and acts which are silo-based and issue-specific; fragmented treatment of environmental media; and jurisdictional overlap and confusion in terms of governance mandates.<sup>19</sup> Although this does not seem to be a particular concern in Finland and the Netherlands, fragmentation in the South African environmental governance effort is exacerbated by unco-operative and bureaucratic governance practices. This may be attributed to, amongst others, lack of human and financial resources, turf protection, bureaucracy and irrational decision-making.

### *7.3.3 Integrated and holistic governance*

Current trends in the environmental governance discourse suggest that fragmented governance regimes should be addressed to establish integrated, or holistic, governance regimes.<sup>20</sup> Holistic environmental governance is the direct opposite of fragmented governance. It is argued that a form of integrated, or holistic governance, may contribute to achieve sustainable environmental governance results, especially insofar as it relates to improvement of service-delivery efforts.

Efforts to establish integrated or holistic environmental governance are, by and large, absent in South Africa and the NWP.<sup>21</sup> No single environmental governance act exists which may establish an integrated environmental governance regime. In the absence of such a single legal mechanism, some strategies however exist to address fragmentation. These include CEG, IEM and IPWM. Despite these mechanisms, it is

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<sup>19</sup> See paragraphs 3.2, 3.3, 4.2, 4.3, 5.2 and 6.3 above.

<sup>20</sup> See paragraph 2.5 above.

<sup>21</sup> See chapter 3 above.

noted that fragmentation at the operational, organisational, substantive and regional levels remains. It is further observed that the IPWM policy, which resembles the concept of IPPC, has not been implemented to date. Hence, it may be derived that fragmentation of the domestic environmental governance regime is still at the order of the day and that, to date, integrated, or holistic environmental governance has not been achieved in South Africa and the NWP.

One of the primary aims of the IPPC Directive is to establish a framework for integrated environmental governance efforts, especially insofar as it relates to pollution prevention and control.<sup>22</sup> In terms of the IPPC Directive, an integrated approach may be achieved by way of, *inter alia*, a one-stop authorisation shop, integrated or fully coordinated administrative structures, and a holistic and integrated approach to the environment and pollution regulation. The principal instrument for the achievement of integration is a 'command and control' authorisation system of pollution regulation that aims to, *inter alia*, harmonise authorisation procedures and authorisation conditions in the EU and individual Member States. This is accomplished by way of a new system of environmental standard setting that is based on an integrated environmental authorisation. The Directive thus provides a broad framework for an integrated approach to specifically IPPC, and generally, environmental governance efforts relating to pollution control. Integration in terms of the Directive further includes: procedural integration, organisational integration, substantive integration, and regional integration.<sup>23</sup> Procedural integration relates to the procedures associated with authorisations. Procedural integration may be established through a single authorisation, a single authorisation-issuing authority, or by way of coordination and integration efforts of procedures and structures pertaining to various administrative organs involved in the authorisation process. This approach arguably describes a one-stop environmental authorisation shop. Organisational integration refers to integration efforts relating to the administrative structures of the authorisation system. This manifestation of integration entails co-operation and coordination of administrative structures and procedures that are overseen by a central lead agent. Substantive integration relates to the content of authorisations and authorisation decisions. In terms of substantive integration, authorisations should

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<sup>22</sup> See chapter 4 above.

<sup>23</sup> See paragraph 4.4 above.

display an integrated and holistic approach to all emissions from an installation by simultaneously taking into account emissions to air, land and water. Integrated, or horizontal environmental legislation, is a prerequisite for substantive integration to be realised. Authorisations should also be based on uniform emission limit values that are founded on BAT. The IPPC Directive further provides the opportunity for regional integration. Regional integration may contribute to address issues such as transboundary pollution, and setting of uniform pollution standards throughout a region. The Directive further provides that Member States establish a regulatory framework to provide for: the scope of application of relevant IPPC legislation; the basic obligations of the operator of an installation; an integrated authorisation; and emission limit values that must be based on BAT.

The EPA is the primary legal mechanism in Finnish law to establish an integrated environmental governance regime.<sup>24</sup> The EPA and its accompanying EPA Decree incorporate all the basic requirements and provisions of the IPPC Directive, and is regarded as a single codification act that essentially aims to reform decision-making mechanisms in the Finnish environmental governance sphere. The EPA is also currently the basic act for regulating environmental pollution in Finland. The primary objective of the Act is to prevent pollution of air, soil and water in a holistic and integrated fashion, by integrating authorisation decision-making mandates, procedures and structures; and by integrating environmental media-specific legislation. The Act is based on the concept of IPPC as it is embodied in the IPPC Directive, and it is envisaged that the integrated environmental governance effort proposed by the EPA may contribute to a more streamlined, cost-effective and timeous procedure for the issuance of environmental authorisations in Finland. The EPA further aims to establish an integrated environmental governance regime by specifically providing for: a wide scope of application that is applicable to a comprehensive set of installations and activities; an integrated three-tiered administrative system with clearly defined roles, responsibilities, mandates and jurisdictions; a specialised research and development authority which supports decision-making authorities; and a BAT Network which aims to promote innovative pollution prevention and control techniques, to enhance the availability of information on authorisation requirements,

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<sup>24</sup> See chapter 5 above.

and to further the utilisation of the most effective methods to address IPPC. The EPA also provides the possibility of expert consultation and involvement by other state departments, which may have an interest in a particular authorisation application. The Act and its accompanying Decree furthermore provide for a detailed and comprehensive list of activities that require authorisation; detailed requirements on what should be included in an authorisation application; a single pollution standard in the form of BAT; procedures for rapport-building, coordination and consultation between the different authorities where an environmental impact may be relevant for the jurisdiction of various authorisation authorities; simultaneous processing of some authorisation applications; a comprehensive set of considerations which must be taken into account by the authorisation authority when considering whether to grant or refuse an authorisation; detailed requirements on the authorisation decision; and an electronic, computer-based system, which aims to streamline and assist in authorisation application, authorisation processing and post-decision follow-up procedures.

The promulgation of the EMA is regarded as an important step in the process towards a more integrated approach of environmental governance in the Netherlands.<sup>25</sup> The Act also represents the primary legal mechanism to establish an integrated environmental governance regime in the Netherlands. Like the Finnish EPA, the EMA is based on the IPPC Directive. The Act replaces previous sectoral legislation and integrates various different types of authorisations into a single, integrated environmental authorisation, namely the EMA authorisation. A more integrated, co-operative and coordinated environmental administration system is also established under the EMA. The primary aim of an integrated authorisation in terms of chapter 8 of the EMA, is the provisions of efficient and effective environmental protection, by way of an integrated consideration of all environmental aspects, and consideration of the most effective way to deal with environmental pollution. This integrated approach represents a break from the past silo-based, sectoral and fragmented approach to pollution prevention and control in particular, and environmental governance efforts in general. The EMA further aims to establish an integrated environmental governance regime by specifically providing for: a wide application

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<sup>25</sup> See chapter 6 above.

scope with detailed categories of installations that need to obtain an authorisation; clearly delineated roles, jurisdictions and mandates with regard to the environmental administration regime; a single pollution standard in the form of ALARA; comprehensive requirements on the relevant information that needs to be included in an authorisation application; specific criteria to both the competent authority and the authorisation applicant for granting or refusing an authorisation; detailed provisions on considerations that must be taken into account by the relevant competent authority in prescribing limitations and other authorisation provisions; and coordination and alignment procedures in those instances where authorisations in terms of other acts are to be considered with the EMA authorisation. The EMA also provides for continual assessment of the activities of an installation by way of obligatory monitoring and reporting requirements; appeal and public participation procedures which are regulated in a separate administrative procedure act; general rules which make it unnecessary to follow the usual burdensome authorisation application procedure; and a more flexible authorisation with fewer requirements in terms of which the administrative system is further streamlined.

It may thus be derived from the foregoing that integrated, or holistic governance represents the ideal form of governance which should essentially be aimed at achieving sustainable governance results. The South African domestic legal order does not provide for a single legal mechanism to establish an integrated environmental governance regime. Nor does it provide for structures, processes, procedures and mechanisms to establish an integrated environmental governance regime, as is the case in Finland and the Netherlands.

Some strategies exist in South Africa and the NWP to address fragmentation. These include IEM, CEG and IPWM. Despite the existence of these mechanisms, it is noted that fragmentation remains. The current environmental governance regime in South Africa and the NWP is accordingly still based on various environmental acts, policies, procedures, processes, and governance tools with *ad-hoc* and silo-based arrangements. This position differs in Finland and the Netherlands. These countries have adopted single environmental governance acts that are based on the IPPC Directive. These acts provide for an integrated treatment of all environmental media which is based on integrated administrative structures, processes, procedures and

tools. The integrated approach advocated by the foreign legal regimes includes procedural, substantive, organisational and regional integration arrangements. Moreover, both the EMA and EPA contain specific provisions on the establishment of an integrated environmental governance effort. It is noted that whilst the Finnish regime provides for a more clearly delineated and integrated environmental administration; the Dutch approach provides for this to a lesser extent. The Dutch regime however provides for specific measures for co-operation and coordination and for other innovative mechanisms such as general rules and the 'umbrella' authorisation which are meant to streamline the administration process. The Finnish regime further provides for a computer-based system to aid decision-making and streamlining of governance tasks and for specialist institutions to aid administrative authorities. Such support systems are absent in the Dutch system. It is also noted that both systems provide for a single pollution standard. The standard in the EMA is however based on the ALARA-principle, whilst the Finnish system is based on BAT. Although the ALARA-principle does not seem to differ significantly from the BAT standard, future legal developments in terms of the EMA may establish provisions that will bring the Dutch approach in closer conformity with the BAT standard as required under the IPPC Directive.

#### *7.3.4 IEM*

IEM is a specific management paradigm that may be utilised to address fragmentation. The concept, as such, is unique to the South African legal order. Some of the elements of IEM are however recognisable in the Finnish and Dutch legal systems.

In South Africa, IEM at the governance level is considered to mean integrated environmental governance, which includes the collection of legislative, executive and administrative functions, processes and instruments used by all organs of state to ensure sustainable behaviour as far as activities, products, services and processes are concerned. Integration is one of the fundamental aspects of IEM.<sup>26</sup>

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<sup>26</sup> See paragraphs 2.6 and 3.5 above.

It has been argued in this study that integration primarily includes the inter-relationship between the different spheres of government, environmental media, different line functionaries of government, the Deming-management approach, decision cycles, and different tools for environmental governance. Integration further entails: integration, or alignment of authorisation arrangements between the various spheres of government; integration or alignment of authorisation arrangements within the same sphere of government, but between various line functions; recognition of the integrated nature of the environmental management cycle to include all PDCA-elements of the Deming-management approach; recognition of the need to address all the phases of a project or development cycle; integrated use of various environmental governance tools and implementation strategies to ensure sustainable governance efforts; and recognition of the human-environment system as a closed system that requires an integrated perspective of the various environmental media in order to prevent intra-media transfer of impacts. Integration in terms of IEM further relates to: alignment of governance policies and strategies across the various spheres and autonomous line functions; alignment of administrative practices, procedures and instrumentation of separate, autonomous line functions of all spheres and line functions to achieve effective and integrated service-delivery efforts; integration between the various spheres and line functionaries of government; integration of the environmental management cycle; and integration of decision-making cycles in the environmental management process. Although IEM presents a viable option to further integration endeavours, the concept is however not correctly understood and applied in South Africa and the NWP. It thus seems that IEM is a specific management or governance paradigm which may be utilised to address fragmentation of the entire environmental governance effort. Notably, IEM is used indiscriminately with EIA in South Africa. This incongruent use of terminology may render the potential that IEM poses as an integration strategy in South Africa and the NWP worthless. It is further noted that a clarification of terminology is of primary importance for the concept to be successfully applied in South Africa and the NWP.

The IPPC Directive does not explicitly entrench the concept of IEM in its provisions.<sup>27</sup> This may be because the Directive is based on the theoretical concept of

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<sup>27</sup> See chapter 4 above.



IPPC. Although IEM and IPPC are two different concepts, it is noted that IPPC embodies some of the common aspects and components of IEM and *vice versa*. Both concepts are, for example, strategies that may be employed to address fragmented environmental governance efforts. Furthermore, these concepts both suggest that integration may be achieved by considering environmental media in an integrated fashion; by integrating governance structures; by integrating tools for environmental management or governance; by aligning administrative practices, procedures and instrumentation of separate, autonomous line functions of all government spheres and line functions; and by integrating or aligning authorisation arrangements.

The Finnish legal system in general, and the EPA in particular, do not explicitly provide for the concept of IEM.<sup>28</sup> Some of the characteristics of IEM are however recognisable in the EPA. These include the need to address fragmentation by, *inter alia*: integrating administrative structures, processes and procedures; treating environmental media in an integrated fashion; and integrating or aligning environmental media-specific legislation.

Like the Finnish legal system, the Dutch environmental law framework, and specifically the EMA, do not explicitly provide for the concept of IEM.<sup>29</sup> Some of the characteristics of IEM are also recognisable in the EMA. These include the need to address fragmentation by, *inter alia*: integrating administrative structures, processes and procedures; treating environmental media in an integrated fashion; integrating or aligning environmental media-specific legislation; and providing for a more flexible approach to 'command and control' regulation in order to lessen the administrative burden on competent authorities and applicants.

It may be derived from the foregoing that IEM is a strategy to achieve integrated environmental governance. This concept is, however, unique to South African law and only some of the elements thereof are provided for by the Finnish and Dutch legal systems. Some common aspects of IEM found in all three jurisdictions include: the need to integrate administrative structures, environmental media, environmental management tools, sectoral legislation and governance processes and procedures.

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<sup>28</sup> See chapter 5 above.

<sup>29</sup> See chapter 6 above.

IEM furthermore resembles the IPPC approach of the Finnish and Dutch legal systems since it denotes a specific manner of governance, namely that of integrated environmental governance. However, whilst the concept of IPPC as favoured by the Dutch and Finnish legal systems, principally refer to pollution prevention and control, IEM is a mechanism which may be used to address fragmentation of the entire environmental governance effort, including, *inter alia*, pollution prevention and control, nature conservation, and land use and planning.

### 7.3.5 CEG

CEG is a strategy to facilitate integration of fragmented environmental governance regimes.<sup>30</sup>

CEG is firmly established in the South African legal order.<sup>31</sup> The concept is entrenched in the 1996 Constitution, environmental framework legislation, sectoral legislation and a new act that specifically deals with co-operative governance. CEG entails integration of the different spheres of government and line functionaries at international, intra-regional and intra-governmental level; co-operation between individual government officials in each sphere/line functionary; co-operation between government officials in different spheres/line functionaries; integration of policy, regulation methods and tools, service provision and scrutiny; and co-operation with industry and the public in order to achieve sustainable governance results. The South African legal order provides for various principles, structures, mechanisms and procedures to facilitate CEG. These include, *inter alia*: constitutional provisions on co-operative governance; a specific act that deals with co-operative governance, namely the IRFA; the CEC; EIPs; EMPs; procedures for conflict resolution; and EMCAs. The establishment of CEG in South Africa may be attributed to the need to address unco-operative and unsustainable organisational behaviour by government officials, and recognition of the fact that the governance regime is fundamentally fragmented.<sup>32</sup> The existence of CEG may further be related to the fact that South Africa does not have a single legal mechanism to achieve integrated environmental

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<sup>30</sup> See paragraph 2.7 above.

<sup>31</sup> See paragraph 3.4 above.

<sup>32</sup> See paragraph 3.3 above.

governance, as is the case with the EMA and the EPA in the Netherlands and Finland respectively. CEG may also specifically contribute to achieve procedural integration at the operational level of government in South Africa and the NWP. However, even though CEG is comprehensively provided for in South African legislation, it is noted that fragmentation persists in the environmental governance sphere. Evidence moreover suggests that CEG seems to have little effect on current unco-operative administrative practices in the environmental governance sphere. One can only come to the conclusion that government, and other interested and affected parties do not fully appreciate the benefits that the concept poses as a strategy to further integration by way of aligned, co-operative and mutually reinforcing governance practices.

The IPPC Directive does not explicitly provide for the concept of CEG.<sup>33</sup> Some of its provisions however resemble the nature and aim of CEG. It is, for example, questioned whether the Directive establishes a totally integrated environmental governance regime, or rather a fully coordinated structure. The compromise to ensure integration, in the absence of a single authorisation and competent authority, is to be found in article 7 of the IPPC Directive.<sup>34</sup> Article 7 requires measures to ensure coordination of authorisation conditions and procedures. Integration should thus primarily be achieved by way of administrative co-operation and coordination, which should be applicable to authorities, relevant procedures, and authorisation conditions. It is also clear that the decision whether to employ a single authorisation, or various authorisations that operate under full coordination by co-operative competent authorities, is left to the discretion of the individual Member States. Integration through co-operation and coordination resorts primarily under organisational integration provided by the Directive. These former characteristics, it is argued, closely resemble the nature of CEG as it is established in South Africa.

CEG is a foreign concept to the Finnish legal system.<sup>35</sup> Some of the elements of CEG may however be found in the provisions of the EMA. For example, when processing an authorisation application, the relevant authority must maintain all necessary contacts with other authorities who are simultaneously processing other authorisation

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<sup>33</sup> See chapter 4 above.

<sup>34</sup> See paragraph 4.4 above.

<sup>35</sup> See chapter 5 above.

applications and plans bearing on the same activities. A copy of the authorisation decision must also be sent to all interested and affected authorities. The EPA furthermore provides the opportunity to lodge certain authorisation applications simultaneously. It is provided in this regard that such applications be considered and processed simultaneously. This may arguably contribute to a more transparent, informed, streamlined, and efficient process where delays in decision-making are avoided. It may also provide the opportunity to applicants and relevant authorities to base their actions on a clear, consistent, and comprehensive procedure that may be beneficial to authorities, applicants and the environment. The computer-based VAHTI-system further aims to, *inter alia*, enhance co-operation between authorities. The benefits of such a system include: integration and collection of data and information necessary in environmental governance processes; dissemination of information to authorities and all other interested and affected parties; facilitation of monitoring and post-decision follow-up; and measures to counter the negative effects of insufficient documentation management and bureaucracy. The Finnish system is the only system amongst those discussed for the purpose of this study, that provides for such a mechanism to practically assist and further co-operation between environmental authorities.

CEG is also not explicitly provided for in the Dutch legal system.<sup>36</sup> It is further noted here that the EMA authorisation does not provide for total integration. Certain authorisations are still regulated in terms of other sectoral acts. The EMA does however provide for coordination and alignment procedures in those instances where authorisations in terms of the SWPA and the *Housing Act* of 1991 need to be considered simultaneously with the EMA authorisation. Coordination and alignment procedures are based on chapter 14 of the EMA and entails, amongst others, that various acts with regard to the authorisation procedure are executed simultaneously.<sup>37</sup> It also provides for coordinated communication of decisions with regard to the authorisation procedure; synchronisation of dates where more than one authorisation application is received; and that authorities should take into account the inter-relatedness of the various authorisation applications. Coordination and alignment of authorisation procedures aim to achieve substantive integration through procedural

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<sup>36</sup> See chapter 6 above.

<sup>37</sup> See paragraph 6.4.7 above.

integration strategies. It is also meant to enhance integration efforts since the current EMA provisions do not provide for 'ideal' or total integration.

It may be derived from the foregoing that CEG, at least as a theoretical concept, is unique to the South African legal order. Of the three jurisdictions, South Africa is the only country which explicitly provides for legislation, constitutional endorsement, structures, procedures, principles and mechanisms to facilitate CEG. Co-operation is however essential to any integrated environmental governance effort. It is thus noteworthy that whilst the Finnish and Dutch legal systems do not explicitly provide for CEG, these legal systems do include some provisions on the practical facilitation of co-operation in those instances where total integration does not exist. These provisions closely resemble the main elements of CEG as it is established in South African law. It may further be derived from the comparative observations and main findings that CEG is a concept that may be employed in those instances where total integration by way of, for example, a one-stop shop is not a viable option. This, at least, seems to be the case in terms of the Finnish and Dutch approaches.

### *7.3.6 IPPC*

The concept of IPPC is widely employed in some EU countries, including Finland and the Netherlands, as a mechanism to address fragmented environmental governance efforts. The IPWM policy in South Africa also resembles the concept of IPPC. IPPC may be utilised to address fragmented environmental governance regimes, especially insofar as it may integrate fragmented pollution regulation efforts.

There have been some efforts to entrench the IPPC concept in South African law by way of the White Paper on IPWM.<sup>38</sup> Some important policy principles, provisions, mechanisms and procedures are established which aim to integrate the current diffuse regime. These include the necessity to establish co-operative governance practices, the need to align administrative procedures, the need to integrate the fragmented legislative regime by establishing a single act that relate to pollution control and waste management; and the eventual establishment of a one-stop environmental

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<sup>38</sup> See paragraph 3.6 above.

authorisation shop. The White Paper further proposes a number of mechanisms to implement the objectives of the policy. The primary mechanism in this regard is a legislative programme that will culminate in new pollution and waste legislation. This proposed legislation has as its objective to, *inter alia*, address current legislative gaps, and clarify and allocate responsibilities within government for pollution and waste management. Key issues to be addressed by the policy on IPWM further include, *inter alia*, the effect that pollution and waste currently have on land, air and water. 'Integration' in terms of the policy should be understood as including integration between environmental media, to address their interactions and overlapping management issues, and between DEAT and the IPWM policy and other regulatory authorities, policies, and strategies, that govern the different environmental media. The White Paper also envisages that a single entry point for authorisation applications will be investigated for this purpose. An analysis of the White Paper on IPWM however suggests that IPWM does not comprehensively mirror the objectives, scope, and nature of IPPC as it is internationally established. It is also noted that whilst the policy envisages a more integrated administration regime that should operate under the strong coordination of a lead agent, subsequent provisions in this regard still preserve the autonomous mandates and functions of existing fragmented authorities. Moreover, the most significant concern in the domestic development of IPPC is the fact that these policy measures have not been codified into environmental law. As far as could be established, no other significant developments in this regard have taken place to date to apply the concept in domestic environmental governance efforts.

The IPPC Directive is based on the concept of IPPC.<sup>39</sup> As such, the Directive proposes a holistic regulatory regime that employs technology-based pollution standards, with the main objective to control industrial pollution through an integrated authorisation procedure and centralised administrative authorities. It also provides for a fully coordinated administration by having regard to all emissions from an industrial installation to all environmental media in an integrated fashion. The IPPC Directive furthermore endorses the concept of IPPC, since it provides for a preventive approach without transferring pollution problems from one environmental medium to another; it

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<sup>39</sup> See chapter 4 and paragraph 7.3.3 above.

enhances prioritisation; it provides for better co-operation with other policy sectors; it allows simplification of the administrative system; it facilitates good management and governance; and it aims to reduce residuals and waste generated by industrial activities in an integrated fashion.

The Finnish EPA comprehensively transposed the provisions of the IPPC Directive into domestic legislation.<sup>40</sup> The Finnish approach to IPPC, and industrial activities in general, is reflected in this legislation. The overall focus of the integrated approach is to establish and further IPPC by way of, *inter alia*, an integrated authorisation system. This is evident from the rationale behind the EPA that essentially focuses, amongst others, on the principle of BAT, a holistic and integrated approach to IPPC and environmental authorisations, and a high level of sustainable environmental protection. An investigation of the EPA suggests that the Finnish approach comprehensively embodies all the elements required in terms of the concept of IPPC as it is established in the IPPC Directive.

The Dutch EMA was enacted well before the establishment of the IPPC Directive.<sup>41</sup> Chapter 8 of the EMA is deemed to encapsulate all, or at least most of the provisions and requirements of the Directive. The general view is that the EMA largely corresponds with the Directive, and in some instances even surpasses the requirements of the Directive. Some uncertainties however remain with regard to certain issues, including amongst others, the relationship between the Directive's BAT requirement and the EMA's ALARA principle. In light of these concerns, the Dutch government is in the process of drafting new legislation that will fully comply with the IPPC Directive. It may be derived from the foregoing that although the EMA is based on the concept of IPPC, future legal developments may arguably enable the Dutch approach to IPPC to more adequately conform to the provisions of the IPPC Directive. However, whilst future reforms may influence the conformity of the EMA to the IPPC Directive, an investigation of the Dutch approach suggests that it comprehensively embodies the main purport of IPPC.

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<sup>40</sup> See chapter 5 and paragraph 7.3.3 above.

<sup>41</sup> See chapter 6 and paragraph 7.3.3 above.

It may be derived from the foregoing that the concept of IPPC, as it is established and understood in Europe, has not been comprehensively entrenched in the South African legal order. The domestic policy on IPWM does resemble IPPC to some extent, since it envisages integration of the fragmented pollution and waste management regime in terms of integrated administrative structures, an integrated consideration of environmental media, integrated legislation and administrative procedures and processes. The European approaches comprehensively embody the concept of IPPC in terms of the IPPC Directive, the EMA and the EPA. The foreign jurisdictions furthermore all contain similar approaches to IPPC in their domestic legislation, which provide for a holistic regulatory regime that employs technology-based pollution standards, with the main objective to control industrial pollution through an integrated authorisation procedure and centralised or fully coordinated administrative authorities.<sup>42</sup> Certain provisions provided for by the IPPC Directive, the EMA and the EPA are however absent in the South African legal order. These include a wide scope of application of the IPPC regime; principles that guide decision-making; substantive provisions on authorisations; detailed requirements on the relevant information that needs to be included in an authorisation application; a uniform pollution standard; continual assessment and post-decision follow-up; detailed provisions on authorisation application procedures; alternative streamlined approaches to regulation such as general rules; procedures for co-operation; and computer-based mechanisms to aid integrated and streamlined decision-making.

#### **7.4 Recommendations**

In light of the foregoing, this study proposes the following possible short-, medium-, and long-term strategies to address the current fragmented environmental governance regime in South Africa and the NWP.<sup>43</sup>

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<sup>42</sup> See also paragraph 7.3.3 above for a comprehensive discussion.

<sup>43</sup> Those strategies that may be easier to implement and which are less drastic in terms of their possible effects are firstly discussed. The more drastic and far-reaching strategies are discussed in the last instance.



#### 7.4.1 *Short-term scenario: optimising the existing regime*

The first scenario for integration reforms is a short-term strategy, which does not entail drastic reforms. It essentially relates to optimisation of current governance structures, processes and mechanisms. There are, for example, established practices in South African law to address fragmentation. These include the concepts of IPPC (albeit in the form of IPWM), CEG and IEM. These strategies, amongst others, should be utilised to optimise environmental governance and service-delivery efforts. This may be done by:

- Recognising that the current fragmented environmental governance regime in South Africa and the NWP may be unsustainable;
- Setting short-, medium- and long-term objectives and targets in terms of the nature and extent of sustainable outcomes which should be achieved by way of governance reforms;
- Clarifying the role of DEAT as the 'supposedly' environmental lead agent in South Africa;
- Clarifying the roles of other environmental departments such as DWAF and DME, especially insofar as it relates to the interaction, mandates and jurisdictions of these other authorities, in relation to DEAT;
- Operationalising and utilising existing CEG mechanisms to facilitate more co-operative and coordinated relations between these and other authorities;
- Addressing bureaucratic and unco-operative administrative behaviour in the ranks of government by, *inter alia*, eliminating turf wars, clarifying jurisdictional confusion, providing adequate human and financial resources to environmental departments, initiate capacity-building programmes, providing clear guidance to authorisation applicants, and by utilising, for example, IEM, CEG and IPWM strategies to improve current unsustainable service-delivery;
- Clarifying terminological confusion relating to IEM and EIA in policy documents and legislation;
- Adopting and implementing the concept of IEM, as a method to facilitate integrated environmental management at governance level, in terms of the entire environmental governance loop in South Africa;

- Adopting and implementing provisions on CEG in the entire environmental governance loop to promote co-operative governance practices and to address bureaucratic and unco-operative administrative behaviour by government officials;
- Operationalising, utilising and optimising CEG principles, tools and structures, such as EMCAs, EIPs, EMPs, conflict resolution methods and the CEC, to practically achieve co-operative practices at the operational level of government;
- Addressing some of the shortcomings of the IRFA;
- Implementing the IRFA and operationalising the procedures and mechanisms of the Act as soon as possible;
- Employing computer-based administrative support systems which may assist environmental authorities in the execution of their tasks;
- Establishing authorisation criteria which are applicable to as many potential polluters as possible, thereby ensuring a high level of sustainable environmental protection;
- Providing detailed guiding principles and procedures which set out, for example, what information must be contained in an authorisation, and which should provide guidance to the applicant and the relevant competent authority during authorisation application procedures;
- Establishing measures, criteria and mechanisms which should provide for post-decision follow-up and continual compliance monitoring of industrial activities and authorisation conditions, by the relevant competent authority and industry alike;
- Providing for broad-based access to information and public participation in the integrated governance effort;
- Providing for detailed measures on the relevant and applicable authorisation application procedures;
- Providing for innovative environmental governance mechanisms alongside environmental authorisations to streamline the administrative and governance effort. These may, for example, include general rules and an 'umbrella authorisation' as provided by the Dutch regime;

- Revisiting and amending the White Paper on IPWM to more adequately conform to the concept of IPPC as it is established in the EU;
- Establishing a single pollution standard such as BAT for South Africa; and
- Implementing the White Paper as soon as possible to reap the benefits presented by an integrated approach to pollution prevention and control.

#### 7.4.2 *Medium-term scenario: procedural integration*

The medium-term scenario entails reforms that are more drastic than the previous scenario. It essentially relates to the integration of procedural aspects of the environmental governance effort. Integration at the operational level of government may be achieved if the fragmented procedural aspects relating to environmental governance efforts are consolidated in a single act which is administered by a single authority. This strategy includes:

- Consolidating all the procedural aspects relating to environmental authorisations, which are currently regulated by various environmental media-specific and sectoral acts, into a single act;
- Establishing a single, integrated authorisation in terms of this act, which must be applicable to all procedural aspects relating to all environmental media;
- Keeping intact all substantive aspects in terms of the various environmental media-specific acts;
- Utilising the concepts of IEM, CEG and IPPC to further enhance procedural integration;
- Removing procedural mandates from current environmental departments, and establishing a single regulatory authority that is responsible for the execution of this act;
- Clearly delineating the relationship, and establishing co-operative strategies between this central authority and other environmental departments in South Africa and the NWP; and
- Establishing support structures for this authority, such as a scientific research centre, to assist the authority in its governance of procedural issues relating to the environment.

#### *7.4.3 Long-term scenario: establishing a one-stop shop*

The third scenario is a long-term scenario, which arguably entails the most drastic measures in terms of reform efforts of the current fragmented regime. This scenario requires the establishment of a one-stop shop which arguably describes the ideal form of integrated, or holistic environmental governance. The proposals to establish a one-stop shop include:

- Repealing all sectoral legislation, including provisions relating to procedural and substantive aspects;
- Establishing an integrated act that provides for all environmental governance aspects, both in a procedural and substantive sense;
- Establishing an integrated authorisation in terms of this act, which must be applicable to all procedural and substantive aspects relating to all environmental media; and
- Comprehensively reforming the current environmental administration by abolishing all existing environmental governance structures and authorities, to provide for a single integrated environmental lead agent that will be responsible for the entire environmental governance effort.

### **7.5    *The way forward***

South Africa is a developing country which faces many challenges. Notably, one of the most profound challenges is the manner in which the current generation addresses environmental concerns. The obligation to conserve the environment for the benefit of present and future generations is largely encapsulated within the parameters of 'governance'. Governance in this context requires a concerted effort of unqualified political buy-in by government and all interested and affected parties to reform the current fragmented environmental governance regime. The ultimate objective of reforms should be the achievement of sustainable benefits in an intra- and inter-generational sense. This study endeavoured to provide some insights into the current state of environmental governance in South Africa and the NWP. For the sake of distilling comparative solutions, it further reflected on best practices in Europe that

relate to the integration of environmental governance regimes. It is hoped that the proposals forwarded herein may serve as a catalyst to spark renewed environmental governance reform initiatives, and to direct these initiatives on a sustainable path.

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# APPENDIX 1: LIST OF PRINCIPAL ENVIRONMENTAL LEGISLATION THAT CONTAINS ENVIRONMENTAL AUTHORISATIONS<sup>44</sup>

## AGRICULTURE<sup>45</sup>

### *Conservation of Agricultural Resources Act 43 of 1983*

#### Empowering provision

#### Relevant competent authority

**Section 6(1):** In order to achieve the objects of this Act, the Minister may prescribe control measures which shall be complied with by land users to whom they apply.

Department of Agriculture

### *Fertilizers, Farm Feeds, Agricultural Remedies and Stock Remedies Act 36 of 1947*

#### Empowering provision

#### Relevant competent authority

**Section 3(1)(a):** Application for registration of a fertilizer, farm feed, agricultural remedy, stock remedy, sterilizing plant or pest control operator shall be made to the registrar in the prescribed manner and shall be accompanied by the prescribed application fee. (b) Any person applying for registration in terms of paragraph (a) shall supply or make available to the registrar, in the manner and at the time and place that he determines, the samples and particulars that he requires. (2) If, after consideration of any such application and after such investigation and enquiry as he may deem necessary, the registrar is satisfied that; (a) the fertilizer, farm feed, agricultural remedy or stock remedy in respect of which registration is applied for is suitable and sufficiently effective for the purposes for which it is intended, and complies with such requirements as may be prescribed, and that it is not contrary to the public interest that it be registered, and that the establishment where it is manufactured is suitable for such manufacture, he shall register such fertilizer, farm feed, agricultural remedy or stock remedy; (b)

Department of Agriculture

<sup>44</sup> See for a similar exposition Wessels *Environmental Authorisations* 13-16.

<sup>45</sup> Apart from authorisation provisions in terms of these principle acts, the following acts may also be applicable to agricultural resources: the *Stock Remedies Act 36 of 1947*, the *Agricultural Pests Act 36 of 1983*; provincial legislation; and by-laws. See further Glazewski *Environmental Law* 218-222, and Glazewski *Environmental Law in South Africa* 184-190.

the sterilizing plant in respect of which registration is applied for is suitable and sufficiently effective for the purpose for which it is intended, and complies with such requirements as may be prescribed, and that it is not contrary to the public interest that such sterilizing plant be registered, he shall register such sterilizing plant; (c) the pest control operator in respect of whom registration is applied for has the prescribed qualifications or is otherwise, to such extent as may be determined by the registrar, skilled in the use of agricultural remedies, and that it is not contrary to the public interest that such pest control operator be registered, he shall register such post control operator: Provided that the registrar may refuse an application for registration of a fertilizer, farm feed, agricultural remedy, stock remedy, sterilizing plant or pest control operator if any previous registration of such a fertilizer, farm feed, agricultural remedy, stock remedy, sterilizing plant or pest control operator has been cancelled under section 4. (3) Any registration under this section shall be subject to the prescribed and any additional conditions as may be determined by the registrar and shall be valid for such period as may be prescribed, and the registrar shall issue in respect of such registration a certificate of registration to the person applying therefore. (4)(a) Any registration under this section may be renewed when the period for which it is valid has lapsed. (b) The provisions of subsections (1), (2) and (3) shall *mutatis mutandis* apply to the renewal of any registration.

**Section 7(1):** No person shall sell any fertilizer, farm feed, agricultural remedy or stock remedy unless; (a) it is registered under this Act under the name or mark under which it is so sold: Provided that a fertilizer, farm feed, agricultural remedy or stock remedy in respect of which the period of validity of the registration has expired, the certificate of registration has been cancelled in terms of section 4 or

has lapsed in terms of section 4A (2) and which, before or on the date of such cancellation or lapse, was no longer under the control of, or owned by the person to whom that certificate of registration was issued, may, subject to the provisions of section 7bis, be sold.

**Section 8:** No person shall use any sterilizing plant unless such plant has been registered in terms of section three.

**Section 12:** No person shall manufacture or sell any fertilizer or farm feed containing bone or any other substance derived from an animal carcass, unless such bone or substance; (a) has been sterilized in such manner as may be prescribed; or (b) has, subject to the provisions of section 16, been imported in terms of a permit issued under the *Animal Diseases and Parasites Act* 13 of 1956.

**Section 16(1):** No person shall import any fertilizer, farm feed, agricultural remedy or stock remedy into the Republic unless; (a) such fertilizer, farm feed, agricultural remedy or stock remedy is registered in terms of this Act, is of the composition and efficacy specified in the application for registration thereof, possesses all chemical, physical and other properties so specified and complies with the requirements prescribed in respect thereof and is packed in a scaled container which is marked or labelled in the prescribed manner with the prescribed particulars.

#### ***Subdivision of Agricultural Land Act 70 of 1970***

##### **Empowering provision**

##### **Relevant competent authority**

**Section 3:** Subject to the provisions of section 2; (a) agricultural land shall not be subdivided; (b) no undivided share in agricultural land not already held by any person, shall vest in any person; (c) no part of any undivided share in agricultural land shall vest in any person, if such part is not already held by any person; (d) no lease in respect of a portion of agricultural land of which the period is 10 years or longer, or is the natural life of the lessee or any other person mentioned in the lease, or which is renewable from

Department of Agriculture



time to time at the will of the lessee, either by the continuation of the original lease or by entering into a new lease, indefinitely or for periods which together with the first period of the lease amount in all to not less than 10 years, shall be entered into; (e)(i) no portion of agricultural land, whether surveyed or not, and whether there is any building thereon or not, shall be sold or advertised for sale, except for the purposes of a mine as defined in section 1 of the *Mines and Works Act* 27 of 1956; and (ii) no right to such portion shall be sold or granted for a period of more than 10 years or for the natural life of any person or to the same person for periods aggregating more than 10 years, or advertised for sale or with a view to any such granting, except for the purposes of a mine as defined in section 1 of the *Mines and Works Act*, 1956; (f) no area of jurisdiction, local area, development area, peri-urban area or other, area referred to in paragraph (a) or (b) of the definition of "agricultural land" in section 1, shall be established on, or enlarged so as to include, any land which is agricultural land; (g) no public notice to the effect that a scheme relating to agricultural land or any portion thereof has been prepared or submitted under the ordinance in question, shall be given, unless the Minister has consented in writing.

## INLAND WATER RESOURCES<sup>46</sup>

### *National Water Act* 36 of 1998

Empowering provision	Relevant competent authority
<b>Section 22(1)(b):</b> A person may only use water if the water use is authorised by a license under this Act.	Department of Water Affairs and Forestry
<b>Section 22(2)(a)-(b):</b> A person who uses water as contemplated in subsection (1); must use the water subject to any condition of the relevant authorisation for that use; and it is subject to any limitation, restriction or prohibition in	

<sup>46</sup> Apart from authorisation provisions in terms of these principle acts, the *Mountain Catchment Areas Act* 63 of 1970, provincial legislation, and by-laws, may also be applicable to inland water resources.



water or discharging any effluent.

***Environment Conservation Act 73 of 1989***

**Empowering provision**

**Section 20(1):** No person shall establish, provide or operate any disposal site without a permit issued by the Minister of Water Affairs and that Minister may; (a) issue a permit subject to such conditions as he may deem fit; (b) alter or cancel any permit or condition in a permit; (c) refuse to issue a permit.

**Relevant competent authority**

Department of Environmental Affairs and Tourism and Department of Water Affairs and Forestry

***Mineral and Petroleum Resources Development Act 28 of 2002***

**Empowering provision**

**Section 5(3):** Subject to this Act, any holder of a prospecting right, a mining right, exploration right or production right may; (d) subject to the *National Water Act* 36 of 1998, use water from any natural spring, lake, river or stream, situated on, or flowing through, such land or from any excavation previously made and used for prospecting, mining, exploration or production purposes, or sink a well or borehole required for use relating to prospecting, mining, exploration or production on such land.

**Section 43(5):** No closure certificate may be issued unless the Chief Inspector and the Department of Water Affairs and Forestry have confirmed in writing that the provisions pertaining to health and safety and management of potential pollution to water resources have been addressed.

**Section 107(1):** The Minister may, by notice in the Gazette, make regulations regarding; (a) (iv) the prevention, control and combating of pollution of the air, land, sea or other water, including ground water, where such pollution is connected to prospecting or mining operations.

**Relevant competent authority**

Department of Minerals and Energy and Department of Water Affairs and Forestry

***Conservation of Agricultural Resources Act 43 of 1983***

**Empowering provision**

**Section 6(1):** In order to achieve the objects of this Act the Minister may prescribe control measures which shall be complied with by land users to whom they apply. (2) Such control measures may relate to, *inter alia* (c) the irrigation of land; (d) the prevention or control of

**Relevant competent authority**

Department of Agriculture



waterlogging or salination of land; (e) the utilization and protection of vleis, marshes, water sponges, water courses and water sources; (f) the regulating of the flow pattern of run-off water; (l) the control of weeds and invader plants; (n) the protection of water sources against pollution on account of farming practices.

#### **Health Act 63 of 1977**

<b>Empowering provision</b>	<b>Relevant competent authority</b>
<p><b>Section 34(1):</b> The Minister may make regulations relating to; (h) the control, restriction or prohibition of the erection of new buildings, and to the provision of sewerage and drainage systems for buildings, the siting, construction and repair of buildings and the provision of water, washing and sanitary conveniences, lighting and ventilation in buildings; (j) the approval, regulation, restriction or prohibition of the use of any place for public gatherings, and to the standards which shall be conformed to in respect of the provision of water and washing and sanitary conveniences, and the serving of food and disposal of waste at, and the provision of sewerage and drainage systems for, such place and such other measures as may be necessary in order to prevent the development at such place of conditions dangerous or detrimental to health.<sup>47</sup></p>	<p>Department of Health</p>

#### **AIR POLLUTION**

#### ***National Environmental Management: Air Quality Act 39 of 2004*<sup>48</sup>**

<b>Empowering provision</b>	<b>Relevant competent authority</b>
<p><b>Section 22:</b> No person may without a provisional atmospheric emission licence or an atmospheric emission licence conduct an activity; (a) listed on the national list anywhere in the Republic; or (b) listed on the list applicable in a province anywhere in that province.</p> <p><b>Section 25(1):</b> No person may</p>	<p>Department of Environmental Affairs and Tourism, and metropolitan and district municipalities</p>

<sup>47</sup> This is just an example of some of the various provisions in the *Health Act 63 of 1977* that empower the Minister to regulate water pollution and health matters connected therewith.

<sup>48</sup> The *National Environmental Management: Air Quality Act 39 of 2004* will replace the *Atmospheric Pollution Prevention Act 4 of 1965*. The Act has however not come into force at the time of writing, and as a result, the provisions of the *Atmospheric Pollution Prevention Act 45 of 1965*, remain applicable.

manufacture, sell or use any appliance or conduct an activity declared as a controlled emitter unless that appliance or activity complies with the standards established in terms of section 24.

**Section 28(1):** No person may manufacture, sell or use a controlled fuel unless that manufacture, sale or use complies with the standards established in terms of section 27.

**Section 37(1):** A person must apply for an atmospheric emission licence by lodging with the licensing authority of the area in which the listed activity is or is to be carried out, an application in the form required by the licensing authority.

**Section 42(1):** The holder of a provisional atmospheric emission licence is entitled to an atmospheric emission licence when the commissioned facility has been in full compliance with the conditions and requirements of the provisional atmospheric emission licence for a period of at least six months.

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***Atmospheric Pollution Prevention Act 45 of 1965<sup>49</sup>***

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**Empowering provision**

**Section 9(1):** Save as provided in subsection (4) of section eleven, no person shall within a controlled area; (a) carry on a scheduled process in or on any premises, unless; (i) he is the holder of a current registration certificate authorising him to carry on that process in or on those premises; or (ii) in the case of a person who was carrying on any such process in or on any premises immediately prior to the date of publication of the notice by virtue of which the area in question is a controlled area, he has within three months after that date applied for the issue to him of a registration certificate authorising the carrying on of that process in or on those premises, and his application has not been refused; or (b) erect or cause to be erected any building or plant, or alter or extend or cause to be

**Relevant competent authority**

Department of Environmental Affairs and Tourism

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<sup>49</sup> The *Occupational Health and Safety Act* 85 of 1993 that provides for the health and safety of mine employees, may also be relevant insofar as it relates to the health and safety of mine workers in relation to air pollution.

altered or extended any existing building or plant, which is intended to be used for the purpose of carrying on any scheduled process in or on any premises, unless he is the holder of a provisional registration certificate authorising the erection, alteration or extension of that building or plant for the said purpose; or (c) alter or extend or cause to be altered or extended an existing building or plant in respect of which a current registration certificate has been issued unless he has, before taking steps to bring about the proposed alteration or extension, applied to the chief officer for provisional registration of the proposed alteration or extension or unless such alteration or extension will not affect the escape into the atmosphere of noxious or offensive gases produced by the scheduled process in question.

**Section 14A(1):** No person shall manufacture or import; (a) any fuel burning appliance for use in a dwelling-house which does not comply with the requirements prescribed by regulation under section 44; or (b) any part for such an appliance which does not comply with the requirements so prescribed, unless he has previously obtained written authority for the manufacture or import thereof from the chief officer.

#### **Health Act 63 of 1977**

##### **Empowering provision**

##### **Relevant competent authority**

**Section 27(1):** Where in the opinion of a local authority a condition has arisen in its district which is of such a nature as to be offensive or a danger to health unless immediately remedied and to which the provisions of the *Atmospheric Pollution Prevention Act 45 of 1965*, are not applicable, it may serve a written notice on the person responsible for such condition having arisen or on the occupier or owner of the dwelling in which or premises on which such condition exists, calling upon him to remedy the condition within such period as may be specified in such notice.

Department of Health

#### **National Road Traffic Act 93 of 1996**

##### **Empowering provision**

##### **Relevant competent authority**



**Section 54:** No person shall, except as prescribed, offer for transportation in a vehicle, or transport in a vehicle, or accept after transportation in, on or by a vehicle, any prescribed dangerous goods.

Department of Transport

## BIODIVERSITY, PLANTS AND ANIMALS<sup>50</sup>

### *National Environmental Management: Biodiversity Act 10 of 2004*

#### **Empowering provision**

#### **Relevant competent authority**

**Section 57(1):** A person may not carry out a restricted activity involving a specimen of a listed threatened or protected species without a permit issued in terms of Chapter 7.

Department of Environmental Affairs and Tourism

**Section 65(1):** A person may not carry out a restricted activity involving a specimen of an alien species without a permit issued in terms of Chapter 7. 65(2) A permit referred to in subsection (1) may be issued only after a prescribed assessment of risks and potential impacts on biodiversity is carried out.

**Section 69(1):** A person authorised by permit, in terms of section 65(1), to carry out a restricted activity involving a specimen of an alien species must (a) comply with the conditions under which the permit has been issued; and (b) take all required steps to prevent or minimise harm to biodiversity.

**Section 71(1):** A person may not carry out a restricted activity involving a specimen of a listed invasive species without a permit issued in terms of Chapter 7. 71(2) A permit referred to in subsection (1) may be issued only after a prescribed assessment of risks and potential impacts on biodiversity is carried out.

**Section 78(1):** If the Minister has reason to believe that the release of a genetically

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<sup>50</sup> Apart from authorisation provisions in terms of these principle acts, the following acts may also be applicable to biodiversity resources: the *Environment Conservation Act* 73 of 1989; the *Plant Breeder's Rights Act* 15 of 1976; the *Plant Improvement Act* 53 of 1976; the *Animal Improvement Act* 62 of 1998; the *Agricultural Pests Act* 36 of 1983; the *Foodstuffs, Cosmetics and Disinfectants Act* 54 of 1972; the *Animal Protection Act* 71 of 1962; the *Sea Birds and Seals Protection Act* 46 of 1973; the *National Veld and Forest Fire Act* 101 of 1998; the *National Parks Act* 57 of 1976; the *Mountain Catchment Areas Act* 63 of 1970; the *Management of State Forests Act* 128 of 1992, provincial legislation, and numerous by-laws. See further Glazewski *Environmental Law* 315-324, 439-456, and Glazewski *Environmental Law in South Africa* 280-291, 395-397.

modified organism into the environment under a permit applied for in terms of the *Genetically Modified Organisms Act* 15 of 1997, may pose a threat to any indigenous species or the environment, no permit for such release may be issued in terms of that Act unless an environmental assessment has been conducted in accordance with Chapter 5 of the *National Environmental Management Act* 107 of 1998 as if such release were a listed activity contemplated in that Chapter.

**Section 81(1):** No person may, without a permit issued in terms of Chapter 7; (a) engage in bioprospecting involving any indigenous biological resources; or (b) export from the Republic any indigenous biological resources for the purpose of bioprospecting or any other kind of research.

**Section 87:** The purpose of this Chapter is to provide for the regulation of the issuing of permits authorising; (a) restricted activities involving specimens of: (i) listed threatened or protected species in terms of section 57(1); (ii) alien species in terms of section 65(1); or (iii) listed invasive species in terms of section 71(1); (b) activities regulated in terms of a notice published in terms of section 57(2); (c) bioprospecting involving indigenous biological resources in terms of section 81(1); or (d) the export of indigenous biological resources for bioprospecting or any other type of research in terms of section 81(1).

**Section 92(1):** If the carrying out of an activity mentioned in section 90 is also regulated in terms of other law, the authority empowered under that other law to authorise that activity and the issuing authority empowered under this Act to issue permits in respect of that activity may; (a) exercise their respective powers jointly; and (b) issue a single integrated permit instead of a separate permit and authorisation.

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***National Forests Act 84 of 1998***

**Empowering provision**

**Relevant competent authority**



**Section 7(1):** No person may (a) cut, disturb, damage or destroy any indigenous, living tree in a natural forest, or (b) possess, collect, remove, transport, export, purchase, sell, donate or in any other manner acquire or dispose of any tree, or any forest product derived from a tree contemplated in paragraph (a), except in terms of; (i) a license issued under subsection (4) or section 23; or (ii) an exemption from the provisions of this subsection published by the Minister in the Gazette on the advice of the Council.

**Section 10(1):** No person may cut, disturb, damage or destroy any forest produce in, or remove or receive any forest produce from, a protected area, except; (a) in terms of the rules made for the proper management of the area in terms of section 11(2)(b); (b) in the course of the management of the protected area by the responsible organ of State or person; (c) in terms of a right of servitude; (d) in terms of the authority of a license granted under section 7(4) or 23.

**Section 15(1):** No person may; (a) cut, disturb, damage or destroy any protected tree; or (b) possess, collect, remove, transport, export, purchase, sell, donate or in any other manner acquire or dispose of any protected tree, or any forest product derived from a protected tree, except under a license granted by the Minister.

**Section 23(1):** The Minister may in a State forest, license; (a) the establishment and management of a plantation; (b) the felling of trees and removal of timber; (c) the cutting, disturbance, damage or destruction of any other forest produce; (d) the removal or receipt of any other forest produce; (e) the use of land, structures or buildings for agricultural, commercial, communications, domestic, industrial, residential or transportation purposes; (f) the use of roads; (g) the moving of water, electricity, gas, fuel and any other thing across a State forest; (h) the construction of any road, building or structure; (i) the grazing or herding of animals; (j) the cultivation of land; (k)

Department of Water Affairs and Forestry

hunting and fishing; (l) the use of a State forest for recreational, educational, cultural or spiritual purposes where there is no right to such use under section 19; and (m) the use of a State forest for any other purpose, if it is consistent with the sustainable management of the forest. (2) No person may engage in any activity in a State forest for which a license is required without such a license.

**Section 24(9):** Nothing in this Act prohibits the grant in terms of any law of a right to prospect for, mine or dispose of any mineral as defined in the *Minerals Act* 50 of 1991, or any source material as defined in the *Nuclear Energy Act*, 131 of 1993, in a State forest but (a) the holder of such a right may not do anything which requires a licence in terms of section 23 without such a licence; and (b) the grant of any such right after the commencement of the *National Forest and Fire Laws Amendment Act*, 2001, must be made subject to the principles set out in section 3(3) of this Act.

**Section 28(4):** The Minister must license the activities which the purchaser may carry on in terms of an agreement to sell timber or other forest produce, subject to subsection (5).

#### ***Genetically Modified Organisms Act 15 of 1997***

##### **Empowering provision**

##### **Relevant competent authority**

**Section 5:** In order to achieve its objectives, the Council may; (a) require any applicant for a permit to use facilities for the development, production, use or application of genetically modified organisms or to release such organisms into the environment, to submit to the Council through the registrar, an assessment of the risk and, where required, an assessment of the impact on the environment of such development, production, use, application or release, as the case may be.

Department of Agriculture

**Section 14:** The Minister may, on the recommendation of the Council, by notice in the *Gazette* prohibit any activity involving genetically modified organisms.

***National Environmental Management: Protected Areas Act 57 of 2003***

<b>Empowering Provision</b>	<b>Relevant competent authority</b>
<b>Section 50(5):</b> No development, construction or farming may be permitted in a nature reserve or world heritage site without the prior written approval of the management authority.	Department of Environmental Affairs and Tourism
<b>Section 48(1):</b> Despite other legislation, no person may conduct commercial prospecting or mining activities; (a) in a special nature reserve or nature reserve; (b) in a protected environment without the written permission of the Minister and the Cabinet member responsible for minerals and energy affairs; or (c) in a protected area referred to in section 9(b) or (d).	

**MINERALS, PETROLEUM AND ENERGY**

***Nuclear Energy Act 46 of 1999***

<b>Empowering provision</b>	<b>Relevant competent authority</b>
<b>Section 34(1):</b> Except with the written authorisation of the Minister, no person, institution, organisation or body may; (a) be in possession of any source material, except where-(i) the possession has resulted from prospecting, reclamation or mining operations lawfully undertaken by the person, institution, organisation or body; or (ii) the possession is on behalf of anyone who had acquired possession of the source material in the manner mentioned in subparagraph (i); or (iii) the person, institution, organisation or body has lawfully acquired the source material in any other manner; (b) be in possession of the following, namely- (i) special nuclear material; (ii) restricted material; (iii) uranium hexafluoride (UF <sub>6</sub> ); (iv) nuclear fuel; (v) nuclear-related equipment and material; (c) acquire, use or dispose of any source material; (d) import any source material into the Republic; (e) process, enrich or reprocess any source material; (f) acquire any special nuclear material; (g) import any special nuclear material into the Republic; (h) use or dispose of any special nuclear material; (i) process,	Department of Minerals and Energy

enrich or reprocess any special nuclear material; (j) acquire any restricted material; (k) import any restricted material into the Republic; (l) use or dispose of any restricted material; (m) produce nuclear energy; (n) manufacture or otherwise produce or acquire, or dispose of, uranium hexafluoride (UF<sub>6</sub>); (o) import uranium hexafluoride (UF<sub>6</sub>) into the Republic; (p) manufacture, or acquire, or dispose of, nuclear fuel; (q) import nuclear fuel into the Republic; (r) manufacture or otherwise produce, import, acquire use or dispose of nuclear-related equipment and material; (s) dispose of, store or reprocess any radioactive waste or irradiated fuel (when the latter is external to the spent fuel pool); (t) transport any of the abovementioned materials; (u) dispose of any technology related to any of the abovementioned materials or equipment.

**Section 35(1):** No person may export any source material, special nuclear material or restricted material or any nuclear-related equipment and material from the Republic except with the written authorisation of the Minister.

**Section 46(1):** Except where authorised by a ministerial authority issued under the *Hazardous Substances Act* 15 of 1973, no person may, without the written permission of the Minister, discard radioactive waste in any manner or cause it to be so discarded. (2) Except with the written permission of the Minister, no person may store any irradiated nuclear fuel or cause it to be stored. (3) A permission in terms of subsection (1) or (2) may be granted subject to any conditions that the Minister, in concurrence with the Minister of Environmental Affairs and Tourism and the Minister of Water Affairs and Forestry, deem fit to impose. The conditions so imposed will be additional to any conditions contained in a nuclear authorisation as defined in section 1 of the *National Nuclear Regulator Act* 47 of 1999.

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### ***National Nuclear Regulator Act 47 of 1999***

#### **Empowering provision**

#### **Relevant competent authority**

**Section 20(1):** No person may site, construct, operate, decontaminate or decommission a nuclear installation, except under the authority of a nuclear installation licence. (2) No vessel which is propelled by nuclear power or which has on board any radioactive material capable of causing nuclear damage may— (a) anchor or sojourn in the territorial waters of the Republic; or (b) enter any port of the Republic, except under the authority of a nuclear vessel licence. (3) No person may engage in any action described in section 2(1)(c) other than any action contemplated in subsection (1) or (2), except under the authority of a certificate of registration or a certificate of exemption.

Department of Minerals and Energy

### ***Mineral and Petroleum Resources Development Act 28 of 2002***

#### **Empowering provision**

#### **Relevant competent authority**

**Section 5(3):** Subject to this Act, any holder of a prospecting right, a mining right, exploration right or production right may; (d) subject to the *National Water Act* 36 of 1998, use water from any natural spring, lake, river or stream, situated on, or flowing through, such land or from any excavation previously made and used for prospecting, mining, exploration or production purposes, or sink a well or borehole required for use relating to prospecting, mining, exploration or production on such land.

Department of Minerals and Energy and the Regional Manager as directed by the Director-General

**Section 5(4):** No person may prospect for or remove, mine, conduct technical co-operation operations, reconnaissance operations, explore for and produce any mineral or petroleum or commence with any work incidental thereto on any area without; (a) an approved environmental management programme or approved environmental management plan, as the case may be; (b) a reconnaissance permission, prospecting right, permission to remove, mining right, mining permit, retention permit, technical co-operation

permit, reconnaissance permit, exploration right or production right, as the case may be; and (c) notifying and consulting with the landowner or lawful occupier of the land in question.

**Section 13(1):** Any person who wishes to apply to the Minister for a reconnaissance permission must lodge the application; (a) at the office of the Regional Manager in whose region the land is situated; (b) in the prescribed manner; and (c) together with the prescribed non-refundable fee.

**Section 16(1):** Any person who wishes to apply to the Minister for a prospecting right must lodge the application; (a) at the office of the Regional Manager in whose region the land is situated; (b) in the prescribed manner; and together with the prescribed non-refundable application fee.

**Section 20(1):** Subject to subsection (2), the holder of a prospecting right may only remove and dispose for his or her own account any mineral found by such holder in the course of prospecting operations conducted pursuant to such prospecting right in such quantities as may be required to conduct tests on it or to identify or analyse it. (2) The holder of a prospecting right must obtain the Minister's written permission to remove and dispose for such holder's own account of bulk samples of any minerals found by such holder in the course of prospecting operations conducted pursuant to such prospecting right.

**Section 22(1):** Any person who wishes to apply to the Minister for a mining right must lodge the application; (a) at the office of the Regional Manager in whose region the land is situated; (b) in the prescribed manner; and (c) together with the prescribed non-refundable application fee.

**Section 22(4):** If the Regional Manager accepts the application, the Regional Manager must, within 14 days from the date of acceptance, notify the applicant in writing; (a) to conduct an environmental impact assessment and submit an

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environmental management programme for approval in terms of section 39.

**Section 27(1):** A mining permit may only be issued if; (a) the mineral in question can be mined optimally within a period of two years; and (b) the mining area in question does not exceed 1,5 hectares in extent. (2) Any person who wishes to apply to the Minister for a mining permit must lodge the application; (a) at the office of the Regional Manager in whose region the land is situated; (b) in the prescribed manner; and (c) together with the prescribed non-refundable application fee.

**Section 39(1):** Every person who has applied for a mining right in terms of section 22 must conduct an environmental impact assessment and submit an environmental management programme within 180 days of the date on which he or she is notified by the Regional Manager to do so. (2) Any person who applies for a reconnaissance permission, prospecting right or mining permit must submit an environmental management plan as prescribed.

**Section 48(1):** Subject to section 20 of the *National Parks Act* 57 of 1976 and subsection (2), no reconnaissance permission, prospecting right, mining right or mining permit may be issued in respect of; (a) land comprising a residential area; (b) any public road, railway or cemetery; (c) any land being used for public or government purposes or reserved in terms of any other law; or (d) areas identified by the Minister by notice in the Gazette in terms of section 49. (2) A reconnaissance permission, prospecting right, mining right or mining permit may be issued in respect of the land contemplated in subsection (1) if the Minister is satisfied that; (a) having regard to the sustainable development of the mineral resources involved and the national interest, it is desirable to issue it; (b) the reconnaissance, prospecting or mining will take place within the framework of national environmental

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management policies, norms and standards; and (c) the granting of such rights or permits will not detrimentally affect the interests of any holder of a prospecting right or mining right.

**Section 74(1):** Any person who wishes to apply to the Minister for a reconnaissance permit must lodge the application; (a) at the office of the designated agency; (b) in the prescribed manner; and (c) together with the prescribed non-refundable application fee.

**Section 76(1):** Any person who wishes to apply to the Minister for a technical co-operation permit must lodge the application; (a) at the office of the designated agency; (b) in the prescribed manner; and (c) together with the prescribed non-refundable application fee.

**Section 79(1):** Any person who wishes to apply to the Minister for an exploration right must lodge the application; (a) at the office of the designated agency; (b) in the prescribed manner; and (c) together with the prescribed non-refundable application fee.

**Section 83(1):** Any person who wishes to apply to the Minister for a production right must lodge the application; (a) at the office of the designated agency; (b) in the prescribed manner; and (c) together with the prescribed non-refundable application fee.

## HERITAGE RESOURCES<sup>51</sup>

### *National Heritage Resources Act 25 of 1999*

Empowering provision	Relevant competent authority
<b>Section 27(18):</b> No person may destroy, damage, deface, excavate, alter, remove from its original position, subdivide or change the planning status of any heritage site without a permit issued by the heritage resources authority responsible for the protection of such site.	South African Heritage Resource Agency, and the Department of Arts and Culture

<sup>51</sup> Apart from authorisation provisions in terms of this principle act, the following acts may also be applicable to heritage resources: the *National Monuments Act* 28 of 1969; the *Wreck and Salvage Act* 94 of 1996; the *Cultural Institutions Act* 119 of 1998; the *National Heritage Council Act* 11 of 1999; the NEMA; provincial legislation, and by-laws. Glazewski *Environmental Law in South Africa* 517-528, and Glazewski *Environmental Law in South Africa* 421-422.



**Section 29(10):** No person may damage, deface, excavate, alter, remove from its original position, subdivide or change the planning status of a provisionally protected place or object without a permit issued by a heritage resources authority or local authority responsible for the provisional protection.

**Section 31((7):** A local authority must provide for the protection of a heritage area through the provisions of its planning scheme or by-laws under this Act, provided that any such protective provisions shall be jointly approved by the provincial heritage resources authority, the provincial planning authority and the local authority, and provided further that; (a) the special consent of the local authority shall be required for any alteration or development affecting a heritage area.

**Section 32(17):** No person may carry out any work of restoration or repair of a heritage object, listed in Part II of the register of heritage objects, without a permit issued by a duly authorised representative of SAHRA. (19) No person may export or attempt to export from South Africa any heritage object without a permit issued by SAHRA.

**Section 34(1):** No person may alter or demolish any structure or part of a structure which is older than 60 years without a permit issued by the relevant provincial heritage resources authority.

**Section 35(4):** No person may, without a permit issued by the responsible heritage resources authority; (a) destroy, damage, excavate, alter, deface or otherwise disturb any archaeological or palaeontological site or any meteorite; (b) destroy, damage, excavate, remove from its original position, collect or own any archaeological or palaeontological material or object or any meteorite; (c) trade in, sell for private gain, export or attempt to export from the Republic any category of archaeological or palaeontological material or object, or any meteorite; or (d) bring onto or use at

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an archaeological or palaeontological site any excavation equipment or any equipment which assist in the detection or recovery of metals or archaeological and palaeontological material or objects, or use such equipment for the recovery of meteorites.

**Section 36(3):** No person may, without a permit issued by SAHRA or a provincial heritage resources authority; (a) destroy, damage, alter, exhume or remove from its original position or otherwise disturb the grave of a victim of conflict, or any burial ground or part thereof which contains such graves; (b) destroy, damage, alter, exhume, remove from its original position or otherwise disturb any grave or burial ground older than 60 years which is situated outside a formal cemetery administered by a local authority; or (c) bring onto or use at a burial ground or grave referred to in paragraph (a) or (b) any excavation equipment, or any equipment which assists in the detection or recovery of metals.

**Section 38:** (1) Subject to the provisions of subsections (7), (8) and (9), any person who intends to undertake a development categorised as; (a) the construction of a road, wall, powerline, pipeline, canal or other similar form of linear development or barrier exceeding 300m in length; (b) the construction of a bridge or similar structure exceeding 50 m in length; (c) any development or other activity which will change the character of a site; (i) exceeding 5 000 m<sup>2</sup> in extent; (ii) involving three or more existing erven or subdivisions thereof; or (iii) involving three or more erven or divisions thereof which have been consolidated within the past five years; or (iv) the costs of which will exceed a sum set in terms of regulations by SAHRA or a provincial heritage resources authority; (d) the rezoning of a site exceeding 10 000 m<sup>2</sup> in extent; or (e) any other category of development provided for in regulations by SAHRA or a provincial heritage resources authority; must at the very

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earliest stages of initiating such a development, notify the responsible heritage resources authority and furnish it with details regarding the location, nature and extent of the proposed development. (2) The responsible heritage resources authority must, within 14 days of receipt of a notification in terms of subsection (1) (a) if there is reason to believe that heritage resources will be affected by such development, notify the person who intends to undertake the development to submit an impact assessment report.

## MARINE RESOURCES AND MARINE POLLUTION<sup>52</sup>

### *Marine Living Resources Act 18 of 1998*

#### Empowering provision

#### Relevant competent authority

**Section 18(1):** No person shall undertake commercial fishing or subsistence fishing, engage in mariculture or operate a fish processing establishment unless a right to undertake or engage in such an activity or to operate such an establishment has been granted to such a person by the Minister. (2) An application for any right referred to in subsection (1) shall be submitted to the Minister in the manner that the Minister may determine. (3) The Minister may require an environmental impact assessment report to be submitted by the applicant.

Department of Environmental Affairs and Tourism

**Section 23(1):** No person shall use a fishing vessel or any other vessel to exercise any right of access unless a local fishing vessel licence has been issued to such person.

**Section 39(1):** No foreign fishing vessel shall be used for fishing or related activities in South African waters unless a foreign fishing vessel licence has been issued to such vessel.

**Section 40:** No person shall undertake fishing or related activities on the high seas by means of a fishing vessel registered in the Republic unless a high

<sup>52</sup> Apart from authorisation provisions in terms of these principle acts, the following acts may also be applicable to marine resources and marine pollution: the *Maritime Zones Act* 15 of 1994; the *Seal Birds and Seals Protection Act* 46 of 1973; the *Health Act* 63 of 1977; provincial legislation, and by-laws. See further Glazewski *Environmental Law* 503-505, and Glazewski *Environmental Law in South Africa* 421-422.

seas fishing vessel licence has been issued in respect of such a fishing vessel.

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

**Empowering provision**

**Relevant competent authority**

**Section 21(1):** No person shall; (a) outside any harbour of which Transnet Limited has become the owner in terms of section 3 of the *Legal Succession to the South African Transport Services Act* 9 of 1989), or a fishing harbour as defined in section 1 of the *Sea Fishery Act* 12 of 1988), and within the prohibited area, render any ship having oil or any other prescribed harmful substance on board (whether as cargo or otherwise), or any tanker, incapable of sailing or maneuvering under its own power; (b) within the prohibited area transfer any oil or other prescribed harmful substance from any ship or tanker to any other ship or tanker or to an offshore installation or from such offshore installation to any ship or tanker, except with the permission of the Authority and in accordance with the provisions of this Act. (2) In giving its permission for the performance of any act referred to in subsection (1), the Authority may impose any conditions subject to which such act shall be performed, and such conditions may include the obligation to obtain the services of one or more tugs, spray boats or other vessels to stand by during a period determined by the Authority.

South African Maritime Safety Authority, and Department of Transport

**Section 24(1):** Subject to the provisions of subsection (2) no person shall operate an offshore installation unless a pollution safety certificate issued in terms of the provisions of this section is in force in respect thereof. (2) No offshore installation which is operated at the date of commencement of this Act shall continue to be so operated after the expiration of a period of twelve months as from the said date unless a pollution safety certificate has in terms of the provisions of this section been issued in respect thereof. (3) Any person desiring a pollution safety certificate shall in writing apply therefore to the Authority, and the



Authority shall, subject to the provisions of subsection (4), upon receipt of such an application issue a pollution safety certificate in the prescribed form in respect of the offshore installation in question, subject to such conditions relating to the operation of the offshore installation as may be determined by the Authority and specified in the pollution safety certificate. (4) No pollution safety certificate shall be issued by the Authority in terms of this section unless the offshore installation in question complies with such conditions and requirements relating to the construction and operation thereof as the Minister may prescribe by regulation. (5) Any person who; (a) operates an offshore installation in contravention of the provisions of subsection (1) or (2); (b) in operating an offshore installation fails to comply with any condition specified in the pollution safety certificate in question, shall be guilty of an offence.

***Dumping at Sea Control Act 73 of 1980***

**Empowering provision**

**Relevant competent authority**

<p><b>Section 3(1):</b> After consultation with a Standing Committee consisting of persons appointed by the Minister for purposes of this section, the Director-general may on application and after taking into account the factors set out in Schedule 3, grant; (a) a special permit authorizing; (i) the dumping, on such conditions as the Director-general may think fit to attach to such permit, of any substance mentioned in Schedule 2; (ii) the disposal at sea, on such conditions as the Director-general may think fit to attach to such permit, of any vessel, aircraft, platform or other manmade structure; (b) a general permit authorizing the dumping, on such conditions as the Director-general may think fit to attach to such permit, of any substance other than that mentioned in Schedule 1 or 2.</p>	<p>Department of Environmental affairs and Tourism</p>
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***Sea Shore Act 21 of 1935***

**Empowering provision**

**Relevant competent authority**

<p><b>Section 3(2):</b> The Minister may permit, on such conditions as he may deem</p>	<p>Department of Transport</p>
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expedient and at such a consideration as he may determine, the removal of any material, except precious stones as defined in section 1 of the *Precious Stones Act* 73 of 1964, natural oil, precious metals or any base mineral as defined in section 1 of the *Mining Rights Act* 20 of 1967, or any aquatic plant, shell or salt as defined in section 1 of the *Sea Fisheries Act* 58 of 1973, from the sea-shore and the sea of which the State President is by section 2 declared to be the owner.

**Section 5(1):** The Minister may authorize the use of any portion of the sea-shore and the sea of which the State President is by section two declared to be the owner, for Government purposes.

## ENVIRONMENTAL IMPACT ASSESSMENT

### *Environment Conservation Act 73 of 1989*<sup>53</sup>

#### Empowering provision

**Section 22(1):** No person shall undertake an activity identified in terms of section 21 (1) or cause such an activity to be undertaken except by virtue of a written authorisation issued by the Minister or by a competent authority or local authority or an officer, which competent authority, authority or officer shall be designated by the Minister by notice in the *Gazette*. (2) The authorisation referred to in subsection (1) shall only be issued after consideration of reports concerning the impact of the proposed activity and of alternative proposed activities on the environment, which shall be compiled and submitted by such persons and in such manner as may be prescribed. (3) The Minister or the competent authority, or a local authority or officer referred to in subsection (1), may at his or its discretion refuse or grant the authorisation for the proposed activity or an alternative proposed activity on such conditions, if any, as he or it may deem

#### Relevant competent authority

Department of Environmental Affairs and Tourism

<sup>53</sup> EIA was previously regulated in terms of the ECA. Section 24 of the NEMA, as amended by the *National Environmental Management Second Amendment Act* 2004, currently regulates EIA in South Africa. It is envisaged that the amended section 24 will come into force during the second part of 2005.

necessary. (4) If a condition imposed in terms of subsection (3) is not being complied with, the Minister, any competent authority or any local authority or officer may withdraw the authorisation in respect of which such condition was imposed, after at least 30 days' written notice was given to the person concerned.

**Section 23(2):** No person shall undertake in a limited development area any development or activity prohibited by the competent authority by notice in the *Official Gazette* or cause such development or activity to be undertaken unless he or she has on application been authorised thereto by the competent authority, or by a local authority designated by the competent authority by notice in the *Official Gazette*, on the conditions contained in such authorisation.

#### *National Environmental Management Act 107 of 1998*

Empowering provision	Relevant competent authority
<b>Section 24(1):</b> In order to give effect to the general objectives of integrated environmental management laid down in this Chapter, the potential impact on the environment of listed activities must be considered, investigated, assessed and reported on to the competent authority charged by this Act with granting the relevant environmental authorisation.	Department of Environmental Affairs and Tourism

#### **POLLUTION CONTROL<sup>54</sup>**

#### *Hazardous Substances Act 15 of 1973*

Empowering provision	Relevant competent authority
<b>Section 3(1):</b> Subject to the provisions of subsections (1A) and (2) no person shall; (a) sell any Group I hazardous substance;	Department of Health

<sup>54</sup> Apart from authorisation provisions in terms of these principle acts, the following acts may also be applicable to pollution control: the NEMA; the ECA; the NWA; the *Health Act* 63 of 1977; the *Foodstuffs, Cosmetics and Disinfectants Act* 54 of 1972; the *International Health Regulations Act* 28 of 1974; the *Nuclear Energy Act* 46 of 1999; the *Nuclear Regulator Act* 47 of 1999; the *Conservation of Agricultural Resources Act* 43 of 1983; the *Fertilisers, Farm Feeds, Agricultural Remedies and Stock Remedies Act* 36 of 1947; the *Agricultural Pests Act* 30 of 1983; the *Occupational Health and Safety Act* 85 of 1993; the *Advertising on Roads and Ribbon Development Act* 21 of 1940; the *National Building Regulations and Building Standards Act* 103 of 1977; the *Aviation Act* 74 of 1962; the *Criminal Procedure Act* 51 of 1977; provincial legislation, and by-laws. See further Glazewski *Environmental Law* 627-779, and Glazewski *Environmental Law in South Africa* 533-630.



(i) unless he is the holder of a licence issued to him in terms of section 4 (a); and; (ii) otherwise than subject to the conditions prescribed or determined by the Director-General; (b) sell, let, use, operate or apply any Group III hazardous substance unless a licence under section 4 (b) is in force in respect thereof, and otherwise than subject to the conditions prescribed or determined by the Director-General; (c) install or keep installed any Group III hazardous substance on any premises unless a licence under section 4 (c) is in force in respect of such premises, and otherwise than subject to the conditions prescribed or determined by the Director-General.

**Section 3A(1):** Subject to the provisions of this section, no person shall produce or otherwise acquire, or dispose of, or import into the Republic or export from there, or be in possession of, or use, or convey or cause to be conveyed, any Group IV hazardous substance, except in terms of a written authority under subsection (2) and in accordance with; (a) the prescribed conditions; and (b) such further conditions (if any) as the Director-General may in each case determine.

**Section 4(1):** Subject to the provisions of this section, the Director-General may on application in the prescribed manner and on payment of the prescribed fee (if any) and subject to the prescribed conditions and such further conditions as the Director-General may in each case determine, issue to any person a licence; (a) to carry on business as a supplier of Group I hazardous substances; (b) to sell, let, use, operate or apply any Group III hazardous substance; (c) to install a Group III hazardous substance on any premises mentioned in such licence.

#### LAND USE AND PLANNING

<sup>55</sup> Apart from authorisation provisions in terms of these principle acts, the following acts may also be applicable to land use and planning: the *Upgrading of Land Tenure Rights Act* 122 of 1991; the *Restitution of Land Rights Act* 22 of 1994; the *Communal Property Associations Act* 28 of 1996; the *Land Reform (Labour Tenants) Act* 3 of 1996; the *Interim Protection of Informal Land Rights Act* 31 of 1996; the *Extension of Security of Tenure Act* 62 of 1997; the *Prevention of Illegal Eviction and Unlawful Occupation of Land Act* 19 of 1998; the *Designated Areas Development Act* 87 of 1979; the



## **Development Facilitation Act 67 of 1995**

### **Empowering provision**

### **Relevant competent authority**

**Section 31(1):** The following land development applicants may apply for establishment of a land development area in terms of this Chapter: (a) An owner of land, including the State or a local government body, in respect of land owned by it; (b) an agent or independent contractor acting on behalf of the owner of land; (c) a person acting with the consent of the owner of land; (d) a person to whom land has been made available by the State or a local government body in terms of a land availability agreement; or (e) a person acting on behalf of the owner of land in any other capacity. (2) A land development applicant shall lodge a land development application, accompanied by the prescribed documents and information, with a designated officer in the prescribed manner.

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**Section 42(1):** Where any local government body or any other interested person or body, including a group of interested persons, has by reason of the actual or likely settlement of persons on, the erection or occupation of any structure on or the layout of land, reasonable grounds for believing that; (a) such activities are performed contrary to the procedures prescribed in this Act or in any other law; or (b) it is in the public interest and the interests of the persons residing or who are going to reside on such land that an exemption under section 30(1) be granted, such body, person or group may refer the matter to the designated officer for investigation. (2) The designated officer shall investigate the matter and submit his or her report thereon to a tribunal. (3) As soon as is reasonably possible after receiving the

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*Less Formal Township Establishment Act 113 of 1991; the Local Government Transition Act 209 of 1993; the Local Government: Municipal Structures Act 117 of 1998; the Local Government: Municipal Systems Act 32 of 2000; the National Building Regulations and Building Standards Act 103 of 1977; and provincial legislation and by-laws. See further Glazewski Environmental Law 222-224, 244-253, Glazewski Environmental Law in South Africa 184-187, 207-215, Scheepers Introduction to the Law Applicable to Development 1-356, and Centre for Environmental Management Report on an Environmental Management System for the North-West Province 136-154.*

report contemplated in subsection (2), a tribunal shall establish whether the settlement of persons, or the erection or occupation of buildings on the land or the layout of the land is in any manner inconsistent with any provision or object of this Act or any other law governing the establishment of land development areas unless an exemption under section 30(1) is granted, and if the tribunal is satisfied that such inconsistency exists, it may grant or decline to grant an exemption contemplated in that section in respect of such area.

**Section 61(1):** Any land development applicant referred to in Chapter V may apply to a tribunal for the approval of a registration arrangement contemplated in this section.

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***Physical Planning Act 125 of 1991***

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**Empowering provision**

**Relevant competent authority**

**Section 27(1):** As from the date of commencement of a regional structure plan in terms of section 16 or an urban structure plan in terms of section 25; (a) no town planning scheme which is binding on that date may be amended in such a way that, and no new town planning scheme may be introduced in which, provision is made for the zoning of land for a purpose which is not consistent with the regional structure plan or the urban structure plan, as the case may be; (b) no person shall use any land in the area to which the regional structure plan or the urban structure plan, as the case may be, applies for a purpose other than the purpose for which it-(i) was being used immediately before that date; or (ii) is zoned in terms of a town planning scheme which is or may become binding in that area: Provided that land to which no such scheme applies may with the consent of, in the case of the regional structure plan, the Administrator concerned or, in the case of the urban structure plan, the responsible authority be used for any purpose determined in the relevant plan or for any other purpose which in the opinion of that

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Administrator or responsible authority is consistent with the relevant plan; (c) no permission, approval or authorisation shall in terms of any law or in terms of any town planning scheme be given for the subdivision or use of land in the area to which the regional structure plan or the urban structure plan, as the case may be, applies for a purpose which is not consistent with the relevant plan; (d) all land in the area to which the regional structure plan or the urban structure plan, as the case may be, applies, other than land which is agricultural land as defined in section 1 of the *Subdivision of Agricultural Land Act 70 of 1970*, and which in terms of the relevant plan may be used for agricultural purposes only, shall be excluded from the provisions of the said Act: Provided that without the prior written approval of the Minister of Agriculture, or an officer designated by him, no permission shall be granted in terms of any law for the subdivision of land which in terms of the relevant plan may be used for agricultural purposes as well as any other purpose.

**Section 29:** The provisions of a plan shall not enable any person to use the land in question in accordance with those provisions unless, if in terms of any other law permission, approval or authorisation is required for such use, that permission, approval or authorisation has been obtained.

#### ***Subdivision of Agricultural Land Act 70 of 1970***

##### **Empowering provision**

##### **Relevant competent authority**

**Section 3:** Subject to the provisions of section 2; (a) agricultural land shall not be subdivided; (b) no undivided share in agricultural land not already held by any person, shall vest in any person; (c) no part of any undivided share in agricultural land shall vest in any person, if such part is not already held by any person; (d) no lease in respect of a portion of agricultural land of which the period is 10 years or longer, or is the natural life of the lessee or any other person mentioned in the lease, or which is renewable from

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time to time at the will of the lessee, either by the continuation of the original lease or by entering into a new lease, indefinitely or for periods which together with the first period of the lease amount in all to not less than 10 years, shall be entered into; (e)(i) no portion of agricultural land, whether surveyed or not, and whether there is any building thereon or not, shall be sold or advertised for sale, except for the purposes of a mine as defined in section 1 of the *Mines and Works Act* 27 of 1956; and (ii) no right to such portion shall be sold or granted for a period of more than 10 years or for the natural life of any person or to the same person for periods aggregating more than 10 years, or advertised for sale or with a view to any such granting, except for the purposes of a mine as defined in section 1 of the *Mines and Works Act*, 1956; (f) no area of jurisdiction, local area, development area, peri-urban area or other, area referred to in paragraph (a) or (b) of the definition of "agricultural land" in section 1, shall be established on, or enlarged so as to include, any land which is agricultural land; (g) no public notice to the effect that a scheme relating to agricultural land or any portion thereof has been prepared or submitted under the ordinance in question, shall be given, unless the Minister has consented in writing.