

# Environmental Management Framework for the Richards Bay Port Expansion Area and Industrial Development Zone



## ENVIRONMENTAL MANAGEMENT FRAMEWORK

In support of the Environmental Impact Assessment Regulations

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A joint initiative between the City of uMhlathuze and the KwaZulu-Natal Department of Agriculture, Environmental Affairs and Rural Development (DAEARD), in association with the Department of Water and Environmental Affairs (DWEA) and the Danish International Development Agency (DANIDA) through the Urban Environmental Management Programme.

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### REPORT DETAILS:

<p><b>Prepared For:</b> The Head Department of Agriculture and Environmental Affairs Private Bag X9059 Pietermaritzburg, South Africa 3200</p>	<p><b>Contact Person:</b> Mrs Sphume Nowele Tel: 033 355 9432 Mobile: 082 461 8810 <a href="mailto:noweles@dae.kzntl.gov.za">noweles@dae.kzntl.gov.za</a></p> <p>(REF: BID ZNB 3579/08A)</p>
<p><b>Prepared By:</b> Thorn-Ex &amp; MetroGIS JV PO Box 800 Hilton 3245</p> <div style="display: flex; align-items: center; gap: 10px;">   </div>	<p><b>Contact Person:</b> Marita Thornhill Tel: 033 343 1814 Mobile: 084 5014665 E-Mail: <a href="mailto:thornhillm@thorn-ex.co.za">thornhillm@thorn-ex.co.za</a></p> <p>(REF: TX2009/C007-36)</p>
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<p><b>Scope of this report:</b> The Draft Environment Management Framework Report is the third and last report in the process of developing the EMF. The report abbreviates the <i>Status Quo Report</i>, the <i>Desired State of Environment Report</i> and the <i>Opportunities and Constraints in each Environmental Management Zone</i>, and establishes management guidelines in terms of Section 24 of NEMA and recommendations on how best to advance sustainability in the study area. The final version of this report is submitted to the MEC for adoption and formalization in the provincial gazette.</p>	
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### PROJECT TEAM MEMBERS:

TEAM MEMBER	PROJECT ROLE
Marita Thornhill	Lead Consultant & Project Manager (Strategic Environmental Management Specialist)
Dawie van Vuuren	GIS coordination & Project co-management (Professional GIS Scientist Practitioner)
Rod Bulman	Public participation (Public Participation and Policy Specialist)
Claudia Mckenzie	Project support (Public Participation Office)
Sue George	Project support (Environmental Assessment Practitioner)
Deon de Wit	Data management and technical assistance (GIS)
Prof Bruce Kelbe	Specialist Hydrologist
Dr Tim O'Connor	Specialist Ecologist (Biodiversity)
Dr Mark Zunckel/Yegeshni Naiker	Specialist Air Quality
Harold Thornhill	Environmental Assessment Practitioner: Impact Management
Vicky Sim	Land use planning
Skhumbuzo Mpungose	Project Intern (Impact Assessment)
Hloniphile Dlamini	Project Intern (Environmental Information Management)

## ACRONYMS USED IN THIS REPORT

<b>CARA</b>	Conservation of Agricultural Resources Act
<b>CBD</b>	Central Business District
<b>DAEA</b>	Department of Agriculture and Environmental Affairs
<b>DAEARD</b>	Department of Agriculture, Environmental Affairs and Rural Development.
<b>DANIDA</b>	Danish International Development Agency
<b>DEA</b>	Department of Environmental Affairs
<b>DEAT</b>	Department of Environmental Affairs and Tourism
<b>DED</b>	Department of Economic Development
<b>DSoE</b>	Desired State of Environment
<b>DTI</b>	Department of Trade and Industry
<b>DWA</b>	Department of Water Affairs
<b>DWAF</b>	Department of Water Affairs and Forestry
<b>EIA</b>	Environmental Impact Assessment
<b>EKZNW</b>	Ezemvelo KwaZulu-Natal Wildlife
<b>EMF</b>	Environmental Management Framework
<b>GGP</b>	Gross Geographic Product
<b>GIS</b>	Geographical Information System
<b>IDP</b>	Integrated Development Plan
<b>IDZ</b>	Industrial Development Zone
<b>LUMS</b>	Land Use Management System
<b>NEMA</b>	National Environmental Management Act
<b>NPA</b>	National Ports Authority
<b>PDF</b>	Port Development Framework
<b>PPES</b>	Public Participation and Stakeholder Engagement Strategy
<b>SANBI</b>	South African Biodiversity Institute
<b>SDF</b>	Spatial Development Framework
<b>SEA</b>	Strategic Environmental Assessment
<b>SEMP</b>	Strategic Environmental Management Plan
<b>SoE</b>	State of the Environment

## GLOSSARY OF TERMS

<b>Attribute</b>	When referring to attribute data, an attribute is a characteristic of a map-feature, like land use of an area or slope of a road. An attribute can be defined as "having been created or originated by", or regarded as "a characteristic of". Attributes of a feature could be related to its quality.
<b>Constraints</b>	The sensitivity of a resource, or combination of resources, will determine the extent to which it will be able to support sustainable development. High resource sensitivity presents low potential and place restrictions or limits (constraints) on development because the risk of damage or harm to sustainable development is high; there may be consequences if the resource is damaged. A specific activity or man-made situation may also be a constraint if it contains attributes that constitute a risk to sustainable development (e.g. it pollutes the environment or causes damage to important resources). Constraints are unfavourable situations that should be eliminated with proactive management.
<b>Development conflicts</b>	Strategic development conflicts occur where more than one environmental opportunity requires the allocation of the same resources.
<b>Environment</b>	Section 1 (xi) of the National Environmental Management Act (1998) defines the environment as an ecological and cultural concept that creates conditions that influence human health and well-being.
<b>Environmental sensitivity</b>	Environmental sensitivity is a measure of how easy it is to inflict damage on a particular area or produce serious consequences from actions on a limited scale. The inherent sensitivity (potential) of a resource is its ability to sustain the ecological goods and services it provides and/or whether the resource has the ability to absorb more change/impact. It is used when determining opportunities and constraints (low sensitivity/high development potential or high sensitivity/low development potential)
<b>Feature</b>	A feature is defined as a distinctive and characteristic part of something else. In the EMF data is translated into categories (e.g. hydrology) which can consist of a number of data features (e.g. a wetland, a river course, a flood plain), sub-features or attributes. A feature could therefore refer to the finer, individual environmental elements that comprise a data category.
<b>Geographical area</b>	A spatially demarcated area with unique characteristics (attribute data) that distinguishes it from another area. These areas require specific management intervention to ensure its future environmental integrity
<b>Opportunities</b>	The sensitivity of a resource, or combination of resources, will determine the extent to which it will be able to support sustainable development. Low resource sensitivity presents high potential and identifies situations that could be beneficial for development because the risk of damage or harm to sustainable development is low. A specific activity or man-made situation may also be an opportunity if it presents attributes that could be used to the benefit of sustainable development. Opportunities are favourable situations that could be exploited by a proactive management approach.
<b>Strategic actions</b>	Policies, plans or programmes are strategic actions. It can involve land use, or development plans for an area, financial allocations, and management of a particular sector (e.g. energy, agriculture) or clusters of related projects. All strategic actions are composed of one or more <i>objectives</i> (could e.g. be called an aim, vision, strategic policy etc) plus more detailed <i>statements</i>

(could e.g. be called actions, measures, implementation plans, policies etc) about how the objectives will be implemented. A policy may be considered as "the inspiration and guidance for action", a plan as "a set of coordinated and timed objectives for the implementation of the policy", and a programme as "a set of projects in a particular area".

**Systemic risks**

Risks imposed by interlinkages and interdependencies in a system where the failure of a single entity or cluster of entities can cause a cascading failure which could potentially bring down the entire system.

**Tiering**

A tiering of strategic actions suggest decision-making from policy to plan to programme and finally to project. There could also be tiering in assessments, from higher-level (policy) SEAs that set a context for, and influence, lower-level SEAs or project EIAs.

**Trade-offs**

A trade-off usually refers to losing one quality or aspect of something in return for gaining another quality or aspect. It implies a decision to be made with full comprehension of both the upside and downside of a particular choice. There are generally two types: compensation or substitution, and net gain and loss calculations. (DEAT, 2007, p30)

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