GENERAL NOTICE

NOTICE 654 OF 2010

DEPARTMENT OF ENVIRONMENTAL AFFAIRS

NATIONAL ENVIRONMENTAL MANAGEMENT ACT, 1998 (ACT NO. 107 OF 1998, AS AMENDED) PUBLICATION OF IMPLEMENTATION GUIDELINES FOR COMMENT

The Minister of Water and Environmental Affairs hereby gives notice of her intention to publish under section 24J of the National Environmental Management Act, 1998 (Act No. 107 of 1998, as amended) the following Implementation Guidelines attached hereto for general public comments

(a) Sector Guidelines for Environmental Impact Assessment Regulations

The Sector Guidelines were developed in terms of 2006 Environmental Impact Assessment Regulations. When commenting, members of the public are kindly requested to take cognisance of the recent amendments to these regulations as the final document will be finalized in terms of the 2010 EIA Regulations. Members of the public are invited to submit written representations or comments to the Director-General: Department of Environmental Affairs, within 30 days of the publication of the notice in Gazette, to the following addresses:

By post to: The Director-General: Department of Environmental Affairs
Attention: Mr S. Zondi
Private Bag X447
Pretoria, 0001

Hand delivered to: The Department of Environmental Affairs
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By fax to: (012) 310 3688, and email to szondi@environment.gov.za

Comments received after the closing date may not be considered.

NOSIPHO NGCABA
DIRECTOR-GENERAL: DEPARTMENT OF ENVIRONMENTAL AFFAIRS

environmental affairs

Department:
Environmental Affairs
REPUBLIC OF SOUTH AFRICA

NATIONAL ENVIRONMENTAL MANAGEMENT ACT (ACT 107 OF 1998) IMPLEMENTATION GUIDELINES

SECTOR GUIDELINES FOR ENVIRONMENTAL IMPACT ASSESSMENT REGULATIONS

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ACKNOWLEDGEMENTS

The input of Working Group 4 participants and a Review Panel comprising representatives from various state organisations was invaluable in preparing this guideline. Working Group 4 includes the provincial environmental departments. The Review Panel participants were drawn from all relevant government departments and organisations. Transnet, Eskom, the Department of Water Affairs (then DWAF), the Department of Human Settlements (formerly Housing) participated in workshops on the guideline.

In addition, the team obtained specialist input from the following organisations:

- Agama Energy and Catherine Fedorsky on energy-related matters
- Bergstan on engineering related issues with respect to linear developments, social infrastructure.
- AgriInformatics on issues relating to agri-industry.
- MCA Planners on planning issues particularly with respect to large-scale property developments and social infrastructure.

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Acronyms and Abbreviations

Applicant	The person who makes an application for an environmental authorisation.
BAR	Basic Assessment Report.
Competent authority	The organ of state responsible for deciding whether or not to grant an environmental authorisation.
Constitution	The Constitution of the Republic of South Africa, 1996.
DEA	Department of Environmental Affairs (formerly the Department Environmental Affairs and Tourism – DEAT).
DFA	Development Facilitation Act, 67 of 1995.
DWA	Department of Water Affairs (formerly the Department Water Affairs and Forestry – DWAF).
EAP	Environmental assessment practitioner.
ECA	Environment Conservation Act, 73 of 1989.
Ecosystem	A dynamic complex of plant, animal and micro-organism communities and their non-living environment, interacting as a functional unit.
EIA	Environmental impact assessment: A process by which the environmental consequences of a proposed activity or project are evaluated and alternatives are analysed. EIA is an integral part of the planning and decision-making processes.
EIA regulations	Environmental impact assessment regulations made under section 24 of the National Environmental Management Act, 107 of 1998.
EIAR	Environmental Impact Assessment Report.
EMP	Environmental Management Programme.
Environment	The surroundings within which humans exist and that are made up of: (a) the land, water and atmosphere of the earth; (b) micro-organisms, plant and animal life; (c) any part or combination of the above, and the interrelationships between them; and (d) the physical, chemical, aesthetic and cultural properties and conditions of the foregoing that influence human health and well-being.
Environmental authorisation	Authorisation in terms of section 24 of the National Environmental Management Act to commence a listed activity.
Environmental Right	The right set out in section 24 of the Constitution.
IA	Impact Assessment.

I&AP	Interested and affected party.
IDP	Integrated Development Plan.
Judicial review	A review by a judge, on application to court by an affected party, of the procedural (as opposed to substantive) correctness of an administrative decision.
Listed activities	Activities identified in terms of section 24 of the National Environmental Management Act which may not commence without environmental authorisation.
MHI	A Major Hazard Installation in terms of the Major Hazard Installation Regulations made under the Occupational Health and Safety Act, 85 of 1993 and published in GN. R. 692 of 30 July 2001.
NEMA	National Environmental Management Act, 107 of 1998.
NEMBA	National Environmental Management: Biodiversity Act, 10 of 2004.
NHRA	National Heritage Resources Act, 25 of 1999.
NWA	National Water Act, 36 of 1998.
Organ of state	Any department in the national, provincial or local sphere of government, and any institution that exercises a public power or performs a public function in terms of any legislation (e.g. South African National Parks, ESKOM, National Roads Agency)
PAIA	Promotion of Access to Information Act, 2 of 2000.
PAJA	Promotion of Administrative Justice Act, 3 of 2000.
Precautionary principle	A principle of national and international environmental law that states that lack of full scientific certainty must not be used as a reason for postponing cost-effective measures to prevent environmental degradation.
PPP	Public participation process.
PRO	Primary Responsible Officer.
SAHRA	South African Heritage Resources Agency.
SANParks	South African National Parks Board.
SDF	Spatial Development Framework.
SEA	Strategic Environmental Assessment.
SR	Scoping Report.
Sustainable development	The integration of social, economic and environmental factors into planning, implementation and decision-making so as to ensure that development serves present and future generations.
TOR	Terms of Reference.

1 Introduction

The Department of Environmental Affairs (DEA) determined that a guideline on the Environmental Impact Assessment (EIA) process would be of value in respect of particular types of developments. These are referred to as "sectors", and the DEA identified 5 sectors that required attention, namely agri-industry projects, energy projects, large-scale property developments, social infrastructure and housing projects and linear developments.

These sectors were selected since they typify developments that include a variety of activities and usually involve large tracts of land, often on the fringe or outside of established urban areas. This means that ordinarily these types of developments require a complexity of issues to be addressed in the EIA process. Typical issues that arise in these sectors are, amongst others:

- difficulties in aligning the EIA process to the project planning cycle, particularly as regards the detail required for EIA documentation. Typically, project design information is not fixed at an early stage, which can create difficulties in identifying issues. Also, changes in project design can be confusing in the context of the public participation process or may even be viewed with suspicion by Interested and Affected Parties (I&APs);

- uncertainties related to legal requirements both in terms of interpretation of the EIA Regulations and in respect of other legislation. Typically projects that fall within the sectors that are the subject of this guideline require more than one approval, permit or authorisation involving various authorities. Thus, there are commenting authorities in the context of the EIA process that may also be decision-makers in respect of another approval or permit that the project requires;

- difficulties in ensuring that all activities within the project that are listed in the EIA Regulations (Listing Notice 1 and Listing Notice 2) are included in the application. The fact that projects within the sectors under consideration are typically large and complex has already been mentioned. Consequently there is a risk that if all of the activities that are subject to environmental authorisation are not identified, there is a risk that elements of the project will not be authorised and could not be commenced; and

- complexities in relation to identifying all relevant issues and assessing these effectively to ensure that adequate information is provided to decision-making authorities. Given the range of potential environmental issues associated with developments within these sectors, the assessment of impacts is complex. This is due to the range of links and cause-and-effect relationships between impacts. It is seldom that there would be a single and linear relationship between an element or aspect of a project and the environmental impact.

This guideline has been developed to assist the various roleplayers in the EIA process when faced with issues such as those described above. Thus the focus is on considering these and other typical difficulties or stumbling blocks, using the five sectors (agri-industry projects, energy projects, large-scale property developments, social infrastructure and housing projects and linear developments) to demonstrate how to deal with them within the EIA process. Whilst this guideline is aimed primarily at addressing these sectors or categories of development, it should also be of value in a broader context since it addresses both generic and sector-specific aspects of the EIA process.

1.1 Structure of the guideline

The guideline is structured as follows:

- **Section 1** provides the context for the guideline. It sets out the purpose of the guideline and who should use it (target audience).
- **Section 2** provides an overview of the EIA process.
- **Section 3** provides an overview of the legal framework, with particular consideration given to legislation that is of relevance to the manner in which the EIA process is conducted. It therefore covers more than the requirements of the National Environmental Management Act; 107 of 1998 (NEMA) and the regulations made under it (the EIA regulations). Legislative provisions in respect of administrative justice, access to information, decision-making roles and co-operative governance are also addressed.
- **Section 4** provides a "how to" guide in respect of the EIA process in respect of:
  - determining the need to apply;
  - identifying and dealing with applicable legal requirements;
  - identifying issues and alternatives;
  - developing the Terms of Reference for specialist studies;
  - conducting public participation;
  - evaluating the significance of impacts; and
  - dealing with mitigation measures;
- **Section 5** provides information to assist Environmental Assessment Practitioners (EAPs) and Applicants to evaluate whether the information being provided is adequate and whether the EIA process requirements have been met, based on both legal and best practice criteria.

A list of references can be found at the end of the document.

1.2 Purpose of guideline

The purpose of this guideline is as follows:

- to provide guidance on how to compile EIAs with information and analysis of a high quality and sufficiently comprehensive to enable the decision-maker to make a well-informed decision;
- to assist EAPs and Applicants in meeting the requirements of the EIA Regulations;
- to provide practical guidance and tools for the EIA process;
- to promote best practice approaches to EIA;
- to strengthen the application of the NEMA principles in the EIA process;
- to encourage an integrated approach in the EIA process, since all elements of the environment are linked or related;
- to guide the assessment of the effects of development proposals with a view to avoiding, minimising or offsetting significant adverse impacts and enhancing benefits;
- to assist developers and consultants through introducing a level of consistency into the EIA process for agri-industry, energy, large-scale property developments, social infrastructure and housing projects; and linear developments, so that requirements are clear.
- to assist the public to become better informed regarding their rights and responsibilities, in an effort to promote more active and responsible public participation; and
- to support the production of clear, objective and quality Basic Assessment, Scoping and EIR (Environmental Impact Report) documents;

Legal Status of Guideline:

The EIA Regulations empower both the Minister and the MEC in a province to make guidelines.[1] Whilst such guidelines are not binding, they must be taken into account when preparing, submitting, processing or considering any application made under the EIA Regulations. This guideline is not a substitute for the EIA Regulations. Reference must be made to the Regulations to ensure that the process is legally compliant. Additional detail on the legal status of guidelines is given in Section 4.4 of this document.

1.3 Target audience

This guideline should be used by:

1. *Applicants/Developers* in formulating their development proposals and in ensuring that land use planning and EIA applications take account of the requirements set out in this document;
2. *EAPs* in undertaking the EIA procedures and investigations;
3. *Professional Consultants* involved in assisting the Applicant (e.g. planners and engineers) in the planning and design of the proposed project;
4. *Environmental decision-making authorities* in evaluating applications, particularly in determining the key factors that should inform the decision and whether the EIA process meets legal and accepted professional standards;
5. *Other decision-making authorities* since this guideline is relevant to any decision-maker that is concerned with regulating the use of land and other resources;
6. *Any party that has an interest in or is affected by such developments (I&APs)* in providing clarity on the EIA process and information requirements; and
7. *Commenting authorities* when fulfilling their commenting role. These authorities include, but are not limited to:
   - the Department in the Province responsible for planning matters;
   - the provincial heritage authority;
   - South African Heritage Resources Agency (SAHRA);
   - the Department of Water Affairs (DWA);
   - the Department of Health;
   - the Department of Transport;
   - the Department of Human Settlements;
   - the Department of Public Enterprises ;
   - the Department of Agriculture, Forests and Fisheries (DAFF);
   - the Department of Mineral Resources;
   - the national (South African National Parks - SANParks) and / or provincial conservation authority; and
   - all municipalities (A, B and C)[2] – particularly those departments concerned with environmental management, nature conservation, spatial planning, land use and zoning, transport planning and control of emissions and waste (e.g. air pollution, effluent/wastewater).

[1] Regulations 73 and 74, respectively.
[2] "A" refers to metropolitan municipalities, "B" to district municipalities and "C" to local municipalities

2 Overview of the EIA Process

Environmental Impact Assessment has existed as an environmental management tool for over 30 years. It is applied internationally and is a legal requirement in many countries. Project-specific environmental assessment is referred to as the "first generation EIA". As a result of limitations in the project-specific approach, impact assessment methodologies evolved, with Strategic Environmental Assessment (SEA) becoming prominent in the 1990s. SEA has been prominent in addressing environmental concerns in relation to policies, programmes or plans and is referred to as the "second generation" of environmental assessment. In recent years, there has been increasing recognition of the need for environmental assessment tools to be adapted so as to become effective in contributing to sustainable development objectives. Thus, Sustainability Assessment has emerged as the "third generation" of environmental assessment.

In South Africa, EIA became a legal requirement in 1997 with the promulgation of regulations under the Environment Conservation Act (Act 73 of 1989) (ECA). Subsequently, NEMA was passed and new EIA Regulations were formulated. These EIA Regulations, which were promulgated in terms of Chapter 5 of NEMA, came into effect on 3 July 2006 (Government Notice No. R. 385, 386 and 387 in *Government Gazette 28753* dated 21 April 2006). The EIA regulations under the ECA have been repealed but continue to apply to applications started before the new regulations came into effect.

Any activity which is listed in Listing Notice 1 or Listing Notice 2 of these EIA Regulations is subject to environmental authorisation. The difference between Listing Notices 1 and 2 is in the process that needs to be followed, with Listing Notice 1 activities being subject to Basic Assessment and those in Listing Notice 2 to Scoping and Impact Assessment (IA). For ease of reference, the term EIA process is used in this guideline when the information provided is relevant to both processes (i.e. Basic Assessment and Scoping and Impact Assessment).

2.1 Purpose of the EIA Process

The overarching purpose of the EIA process is to determine, assess and evaluate the consequences (positive and negative) of a proposed development, activity or project. Thus the EIA must consider the strategic context of a development proposal along with broader societal needs, the natural resource base and the public interest. Ways to avoid negative impacts and enhance benefits must be addressed. Where negative impacts cannot be avoided, measures to minimise these must be sought. Consideration must be given to the probable significance or "acceptability" of the effects or consequences, based on clear criteria. The criteria that are used to determine the significance of impacts are a critical component of the EIA and a suggested approach in this respect is provided in Section 4.8 of this guideline.

For the purposes of NEMA, an environmental impact means, in essence, any impacts on land, water, the atmosphere or living organisms, or on the inter-relationships between them, and impacts on their physical, chemical, aesthetic and cultural properties and conditions that influence human health and well-being. These impacts may be both positive (in the sense that they improve the integrity and health of an ecosystem or human health and well being) or negative. This means that virtually any significant impact on the surroundings within which we live, including impacts on the built environment and socio-economic impacts that affect human health or well-being, must be assessed during the EIA process.

An iterative approach is appropriate for the purposes of the EIA process. This is required in order to achieve the key purpose of EIA, which is to identify solutions, approaches or options for development that best meets sustainability objectives. Throughout the EIA process there are opportunities to constantly refine and adapt the development proposal to respond to these issues or concerns, in relation to the natural, social and economic factors.

2.2 Key stages of the EIA process

The assessment process, whether it is a Basic Assessment or Scoping and IA, is made up of the following three steps (see Figure 1):

1. *Application or notification phase:* This involves completion of information in an application form (in the case of scoping and EIA) or a notification form (in the case of Basic Assessment) for submission to the competent authority. This step in the process is largely for administrative purposes, since it is the means for registering the project (which will then be allocated a reference number and case officer). It is advisable for the Applicant and the EAP to confirm the activities for which application is being made, particularly when the final documentation is submitted (i.e. Basic Assessment Report (BAR) or EIR). Projects can change and evolve during the EIA process.

2. *Scoping phase:* The aim of the scoping phase is to address the question: "What issues and alternatives need further investigation?" While the scoping phase culminates in a scoping report in the scoping/EIA process, it is done in preparation for and prior to the compilation of the BAR in the basic assessment process. The scoping stage involves two key activities. Firstly, environmental issues and concerns that require investigation need to be identified and secondly, feasible alternatives[3] that require assessment need to be determined. This information is then used to determine the scope of the EIA. Environmental issues and feasible alternatives are identified through consultation with the authorities, I&APs and specialists. In addition, the project team must use its knowledge and experience to identify issues and alternatives. The applicant or developer must also provide input on potential issues and alternatives, particularly where they have constructed or operate similar facilities elsewhere in South Africa.

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***Scoping* should ask and answer the question:**

- Which issues and alternatives need to be considered and assessed?

***EIA* should ask and answer the questions:**

- What are the possible consequences of this development?
- How significant are these consequences?
- What can be done to avoid significant harmful negative environmental impacts and where these cannot be avoided, what can be done to minimise them?
- What can be done to enhance positive impacts?

[3] Alternatives are defined in the EIA regulations as follows: "***"alternatives"***, in relation to a proposed activity, means different means of meeting the general purpose and requirements of the activity, which may include alternatives to –
(a) the property on which or location where it is proposed to undertake the activity;
(b) the type of activity to be undertaken;
(c) the design or layout of the activity;
(d) the technology to be used in the activity; and
(e) the operational aspects of the activity."

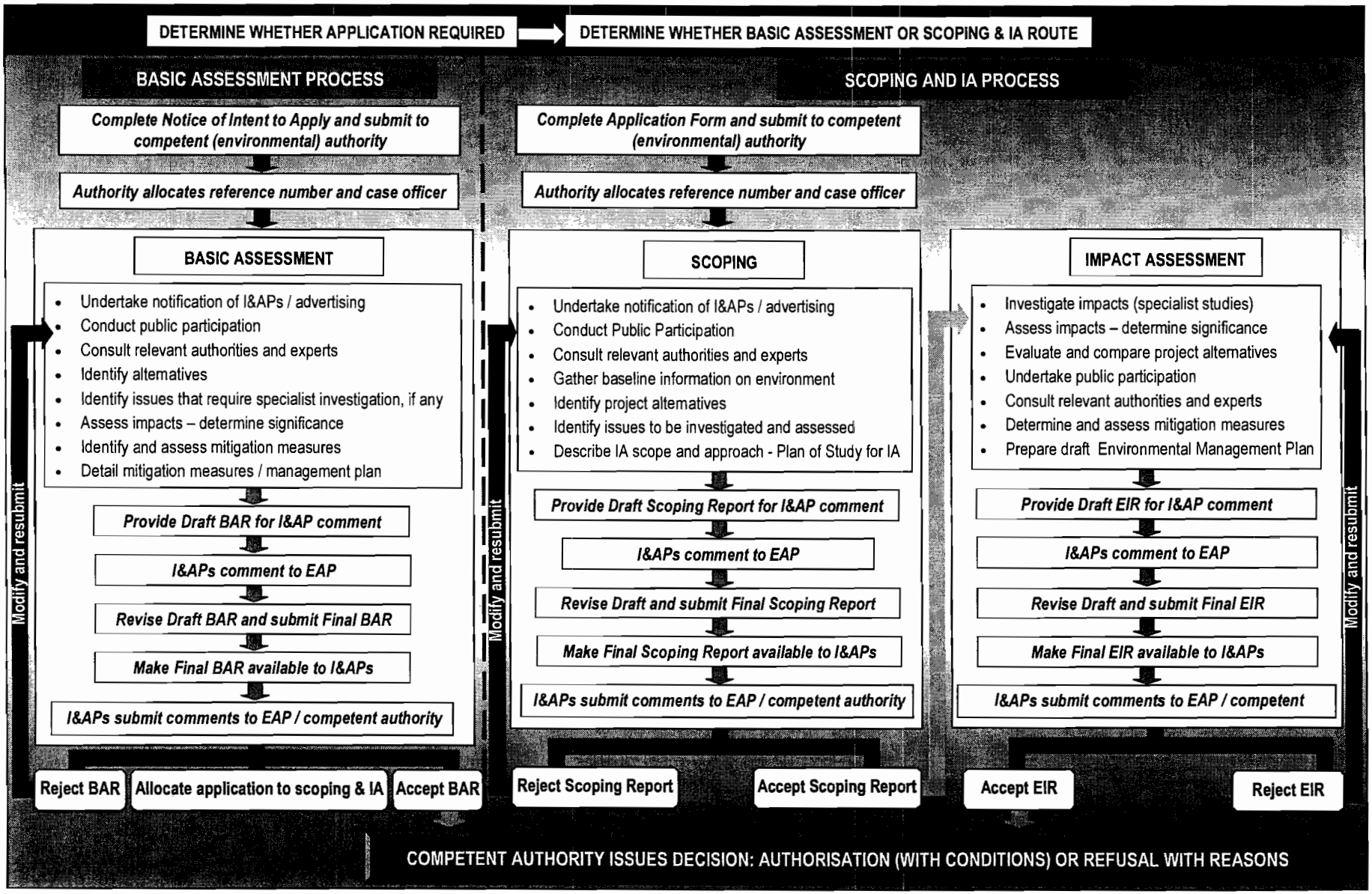
In summary, scoping serves four key purposes:

- to determine the scope of work for the EIA, namely the issues and alternatives that need to be investigated and assessed;
- to initiate a public participation process to inform I&APs about the project and to obtain their input on issues and concerns that they may have about the project;
- to identify, based on existing information and knowledge, whether there are any potential negative environmental impacts that could preclude the development proceeding; and
- to determine, based on existing information and knowledge, what changes should be made to the project design or plan to resolve (i.e. avoid) or reduce potential negative environmental impacts or to enhance potential positive impacts.

3. *Impact Assessment phase:* The basic questions that must be addressed during this phase are:
   - Will the proposed development contribute to or result in the achievement of sustainable development?
   - What are the potential positive and negative environmental effects of this proposed development?
   - How can any significantly harmful impacts be avoided or reduced (i.e. mitigated) and positive impacts be enhanced?, and
   - What is the level of certainty that mitigation measures will be implemented and that they will be effective?

   In general, determining the significance of impacts involves the undertaking of a number of specialist studies – a specialist study is conducted for each issue where there may be significant impacts (e.g. an air quality study may be carried out because of potentially significant impacts associated with stack emissions). Both the positive environmental impacts and the measures to avoid or minimise significantly harmful impacts (i.e. mitigation measures) need to be considered. Impacts must be assessed for all the alternatives that have been identified, with a view to identifying the most environmentally appropriate option. Public participation activities take place throughout the impact assessment phase.

FIGURE 1: Overview of the EIA Process



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3 Overview of the Legal Framework

Apart from the provisions of NEMA and the EIA regulations, applicants, decision-makers and I&APs must also take into account other laws and legal principles applicable to the EIA process. A description of the legal requirements of the EIA process is provided in this section, followed by a brief overview of the other key applicable laws and principles. The section is structured as follows:

- A description of the applicable legislation or principle is provided (Section 3.1).
- The implications of the applicable legislation are considered for the key roleplayers, namely Applicant and EAP, the decision-maker and I&APs.

It is important to bear in mind that while the Applicant is the person who intends to submit an application and in whose name the application is made, it is the EAP who manages the content and process of the application. He or she must be appointed by the Applicant before an application is made. In most cases, legal rights and duties apply directly to the EAP, acting on behalf of the Applicant, but in some instances, rights and duties also rest independently on the Applicant. Where the latter is the case the distinction is described in this guideline.

The EIA process comprises the following activities:

- determining whether an application for an environmental authorisation is required; and if so:
- determining who the competent authority is;
- determining whether the Basic Assessment process or the scoping and EIA process must be undertaken;
- lodging the application in accordance with the relevant competent authority's application form;
- completing the required assessment, including public participation, and submitting it to the competent authority for consideration; and
- issuing of a decision by the competent authority (authorisation or refusal).

There is a statutory appeal period, whereby notification of the intention to appeal must be lodged with the Minister or MEC concerned within 10 days of receiving notification of the decision. The appeal itself must be submitted within 30 days thereafter and no one may submit an appeal unless the required notification was lodged. The Minister, MEC or delegated organ of state may however extend the period within which notice of intention to appeal or the appeal itself must be submitted.

3.1 Key Applicable Legislation

The requirement to obtain environmental authorisation for certain development proposals or projects is legislated in NEMA. The EIA Regulations make provision for two types or levels of assessment, namely Basic Assessment and Scoping and EIA. The EIA regulations specify that:

- all activities that appear in Listing Notice 1(GN No. R. 386 of 21 April 2006) require a Basic Assessment;
- all activities that appear in Listing Notice 2 (GN No. R. 387 of 21 April 2006) are subject to scoping and EIA; and
- where an application involves activities from both Listing Notices, scoping and EIA must be undertaken.

Furthermore, the EIA regulations make provision for an application to also be subjected to the scoping and EIA process on the basis of the results of the Basic Assessment.[4] If an applicant intends to undertake an activity to which basic assessment must be applied and based on the advice of the EAP is of the view that is unlikely that the competent authority will be able to reach a decision based on the information contained in the basic assessment report, the applicant may apply for permission to apply scoping instead of basic assessment to the application.

Minimum Requirements in Terms of Section 24 of NEMA

Section 24 of NEMA sets out the minimum requirements that every application for an environmental authorisation must comply with. They are:

Co-operative Governance

- Where the activity concerned falls under the jurisdiction of more than one organ of state, there must be coordination and cooperation between the relevant organs of state, when considering the assessment.
- Reference should be made to the principles of cooperative governance.
- When making decisions, organs of state must consider the findings and recommendations flowing from an investigation, the general objectives of integrated environmental management laid down in NEMA as well as the section 2 principles for environmental management contained in NEMA. There must be an indication that the decision-maker has applied his or her mind to these considerations.

Investigation and Assessment

- Where it is determined that the environment is likely to be significantly affected by the proposed activity in an application for an environmental authorisation, that environment must be clearly and accurately described, the potential consequences for the environment must be properly investigated, and thereafter the significance of each of the potential consequences / impacts must be assessed.

Public Participation

- There must be full and proper public information and public participation procedures.
- All I&APs, including all spheres of government that have jurisdiction over the activity in question must be given a reasonable opportunity to participate in the information and public participation procedures.

Alternatives and Mitigation Measures

- All applications for environmental authorisation must include an investigation of alternatives to the proposed activity, which must consider the potential consequences or impacts of each alternative.
- The "no go option" must be assessed, which involves investigating the environmental impacts of not undertaking the activity.
- Mitigation measures to avoid, minimise or remedy adverse impacts must also be investigated.

Gaps in Knowledge

- It is a further requirement that gaps in knowledge be reported upon, as well as the adequacy of the predictive methods and underlying assumptions used in the assessment of the potential impacts.
- It is important to report any uncertainties that were encountered while compiling the information.

Monitoring and Management of Consequences

- Arrangements for the monitoring and management of consequences for, or impacts on the environment must be investigated and formulated.
- There must be follow up in that the effectiveness of the monitoring and management arrangements must be evaluated during the implementation (construction and operation) of the activity.

Compilation of Information and Maps

- NEMA makes provision for the Minister or an MEC with the concurrence of the Minister to compile information and maps[5] that specify the attributes of the environment in particular geographical areas. The information or maps may include the sensitivity, extent, interrelationship and significance of such attributes. Where such information or maps exist, the environmental attributes specified therein must be taken into consideration in compiling the application.

[4] Regulation 25 of GN R 385.
[5] This provision relates to the Environmental Management Frameworks that are provided for in the EIA Regulations.

Other Legal Requirements

- The application must make provision for adherence to requirements that are prescribed in any specific environmental management act that is relevant to the listed or specified activity in question.
- There must be investigation, assessment and evaluation of the impact of any proposed listed or specified activity on any national estate referred to in section 3(2) of the National Heritage Resources Act (excluding the National Estate contemplated in section 3(2)(i)(vi)(vii) of that Act).

Overview of the EIA Regulations and their purpose

Chapter 5 of NEMA focuses on promoting the use of appropriate environmental tools, primarily environmental and social impact assessment procedures, as a means to achieve the goal of integrated environmental management. The EIA Regulations, made under section 24 of NEMA, are intended to integrate and facilitate environmental impact management with development activities or processes, in line with sustainable development objectives. They provide a method for the investigation, assessment and communication of the potential consequences or impacts of listed activities. The EIA process must not only provide the competent authority with all the information necessary to make an informed decision, but it should also provide the applicant with sufficient information to enable him to decide to amend or withdraw his application where the activities will result in unacceptable environmental impacts.

The purpose of the EIA Regulations is therefore to ensure that the impacts of activities for which environmental authorisations are necessary are properly assessed; so that the positive environmental impacts are enhanced; the activities which may have an unacceptable, negative effect on the environment are not authorised and those which are suitable for authorisation are approved, with conditions to avoid or mitigate possible detrimental effects. In essence, the goal of the EIA process is that it is an objective process that contributes to the goal of sustainable development.

Bill of Rights

The Constitution of the Republic of South Africa, 1996 ("the Constitution") is the supreme law in South Africa. Chapter 2 of the Constitution contains the Bill of Rights including section 24 which provides 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."

Other rights protected by the Constitution are relevant to an application for environmental authorisation. Those rights include the right to administrative justice[6] and to information[7], and some rights, known as "socio-economic rights", such as access to adequate housing.[8] In general, the State has a duty to ensure the progressive realisation of socio-economic rights.

The right to administrative justice is relevant to applications for environmental authorisations because decisions made by the competent authority in the course of the EIA process (such as the decision to accept a scoping report) as well as a final decision on the application fall into the definition of "administrative action" in the Promotion of Administrative Justice Act, 3 of 2000 (PAJA).[9] This is discussed in more detail below.

[6] Section 33.
[7] Section 32.
[8] Section 26.
[9] Section 1.

Functional areas of national, provincial and local government competence

The environment is included in Schedule 4 to the Constitution as a functional area of concurrent national and provincial legislative competence. This means that both national and provincial government have the power to make legislation that affects the environment. Where a conflict exists between national and provincial legislation, national legislation that applies uniformly with regard to the country as a whole prevails over provincial legislation if any of the conditions set out in section 146 of the Constitution are met. The conditions include where the national legislation is necessary for the protection of the environment and where a matter requires uniformity across the nation and the national legislation is necessary to maintain security or economic unity. Other functional areas relevant to this guideline are also listed in Schedule 4. They include agriculture, soil conservation, nature conservation, housing, public transport, regional planning and development, urban and rural development and pollution control.

Schedule 5 of the Constitution contains matters of exclusive provincial legislative competence. They include provincial planning and provincial roads. The national government has exclusive legislative competence in respect of matters not listed in Schedules 4 and 5; these matters include energy and water (other than sanitation and potable water systems).

Local government (municipalities)

Municipalities have specific responsibilities in terms of ensuring sustainable development. The Local Government: Municipal Systems Act, 32 of 2000, for example defines development to mean:

"sustainable development, and includes integrated social, economic, environmental, spatial, infrastructural, institutional, organisational and human resources upliftment of a community aimed at –
improving the quality of life of its members with specific reference to the poor and other disadvantaged sections of the community; and
ensuring that development serves present and future generations;"[10]

The Act specifically requires that municipal services be environmentally sustainable.[11] "Environmentally sustainable" in relation to the provision of a municipal service, means the provision of a municipal service in a manner aimed at ensuring that –

- the risk of harm to the environment and to human health and safety is minimised to the extent reasonably possible under the circumstances;
- the potential benefits to the environment and to human health and safety are maximised to the extent reasonably possible under the circumstances; and
- legislation intended to protect the environment and human health and safety is complied with.

The Act further provides that the national Minister responsible for Local Government may make regulations or issue guidelines for incentives and penalties to encourage the efficient use of resources when providing services, the recycling of waste and other environmental objectives.[12]

Cooperative governance

The principle that different organs of state and spheres of government must cooperate with one another is a fundamental feature of the Constitution. Chapter 3 of the Constitution sets out principles of cooperative government and intergovernmental relations which must be applied by all spheres of government. Among these principles is the requirement that organs of state must cooperate with one another in mutual trust and good faith by, among other things, informing one another of, and consulting one another on matters of common interest[13] and co-ordinating their actions with one another.[14]

The principles of cooperative governance are, to some extent, given effect to in NEMA and the EIA regulations. The NEMA principles require intergovernmental co-ordination and harmonisation of policies, legislation and actions relating to the environment.[15] NEMA provides that a competent authority must consult

[10] Section 1.
[11] Section 73(2)(d).
[12] Section 86A(e).
[13] Section 41(1)(h)(iii).
[14] Section 41(1)(h)(iv).
[15] Section 2(4)(l).

with every state department that administers a law relating to a matter affecting the environment when considering an application for environmental authorisation.[16] NEMA and the EIA regulations also provide for consultation and written agreements between the Minister or MEC and any organ of state responsible for administering the legislation relating to any aspect of an activity that also requires environmental authorisation under NEMA. This is discussed in more detail in the section dealing with establishing whether other authorisations or approvals are necessary (Section 4.2.1).

Promotion of Administrative Justice Act

This Act gives effect to the Constitutional right to administrative action that is lawful, reasonable and procedurally fair. It also gives effect to the right to written reasons for administrative action as contemplated in section 33 of the Constitution. The Act aims to promote an efficient administration and good governance and to create a culture of accountability, openness and transparency in the public administration or in the exercise of a public power or the performance of a public function by giving effect to the right to just administrative action. In terms of the Act, administrative action which materially and adversely affects the rights or legitimate expectations of any person must be procedurally fair.

WHAT IS ADMINISTRATIVE ACTION?

"Administrative action" as defined in section 1 of PAJA means any decision taken, or any failure to take a decision, by –

(a) an organ of state, when
  (i) exercising a power in terms of the Constitution or a provincial constitution; or
  (ii) exercising a public power or performing a public function in terms of any legislation; or

(b) a natural or juristic person, other than an organ of state, when exercising a public power or performing a public function in terms of an empowering provision, which adversely affects the rights of any person and which has a direct, external legal effect, excluding certain classes of executive, legislative and quasi-judicial functions set out in the Act.

A "decision" is:

"Any decision of an administrative nature made, proposed to be made, or required to be made, as the case may be, under an empowering provision, including a decision relating to –

- making, suspending, revoking or refusing to make an order, award or determination;
- giving, suspending, revoking or refusing to give a certificate, direction, approval, consent or permission;
- issuing, suspending, revoking or refusing to issue a licence, authority or other instrument;
- imposing a condition or restriction;
- making a declaration, demand or requirement;
- retaining, or refusing to deliver up, an article; or
- doing or refusing to do any other act or thing of an administrative nature, and a reference to failure to take a decision must be construed accordingly."

What is regarded as fair administrative procedure depends on the circumstances but PAJA provides guidance in this regard. In the case of administrative action that affects "any person", a person undertaking the administrative action is obliged to:

- give notice of the nature and purpose of the action;
- afford involved persons a reasonable opportunity to make representations about the action;
- give a clear statement of the administrative action;
- give adequate notice of the right of review or appeal; and
- give adequate notice of the right to request reasons.[17]

Departures from these provisions are allowable only where "reasonable and justifiable in the

[16] Section 24 O(2).
[17] Section 3(2)(b). An administrator also has a discretion to give people an opportunity to obtain assistance, including legal representation, to present and dispute legal arguments and to appear at hearings in person (section 3(3)).

circumstances",[18] or where a law, agreement or other instrument lays down a different, but fair, procedure.[19]

PAJA makes a distinction between administrative action which "materially and adversely affects the rights or legitimate expectations of any person" (Section 3) and administrative action that "materially and adversely affects the rights of the public" (Section 4). Where administrative action could be said to affect the public, the action-taker has a discretion to decide what steps to follow to give effect to fair procedure, including holding public enquiries, following notice and comment procedures or following other fair procedures.[20]

Right to reasons

PAJA also fortifies the constitutional right to request reasons for administrative action, by providing for a procedure in terms of which a person can request written reasons where his or her rights have been adversely and materially affected.[21]

Judicial review

PAJA provides numerous grounds on which administrative action may be reviewed by a court.[22] The grounds include that:

- the decision-maker was not empowered to take the decision, or was biased;[23]
- he or she took into account irrelevant considerations or failed to consider relevant ones;[24]
- the action was not rationally connected to the purpose for which it was taken;[25] and
- that the action was unreasonable.[26]

Courts have wide powers to grant remedies when undertaking review of administrative action, including setting aside the administrative action.[27] Consequently any person responsible for making an administrative decision must ensure that this is done in a manner that does not create grounds for review.

Promotion of Access to Information Act (PAIA)

This Act gives effect to Section 32 of the Constitution by providing mechanisms to ensure access to certain information held by a public body as well as to information held by private bodies (in the latter case, as long as this information is required in order to exercise or protect any rights). The Act allows for access to records, regardless of when such records came into existence.[28] The Act specifically retains Sections 31 (1) and (2) of NEMA which also deal with access to information from a public or private body. While the Act confers specific rights of access to information, I&APs should not forego the normal public participation process and only try to obtain information through the PAIA provisions. As registered I&APs, they have specific rights (and responsibilities) in terms of being afforded an opportunity to "access" all the information, to provide comments and to be informed of the outcome.

[18] Section 3(4)(a).
[19] Section 3(5).
[20] Section 4(1).
[21] Section 5.
[22] Section 6.
[23] Section 6(2)(a).
[24] Section 6(2)(e)(iii).
[25] Section 6(2)(f)(ii)(aa).
[26] Section 6(2)(h).
[27] Section 8(1)(c).
[28] Section 3.

3.1.1 Legal framework applicable to the Applicant / EAP

LEGISLATION	REQUIREMENTS	IMPLICATIONS
The EIA Regulations		
GN No. R. 385 of 21 April 2006		The purpose of the EIA Regulations from the Applicant's point of view is to set out the steps that the Applicant must take, and the time frames within which the Applicant must take them, before an application for authorisation can be considered and granted or refused.
Regulation 17	Appointment of an EAP	The steps which an Applicant must take include the appointment of an EAP to manage the application process. For the purposes of the EIA regulations the role of the EAP and Applicant become virtually synonymous.
Regulation 15	Combined applications	Where two or more activities will occur on one site or more than one activity of the same type will occur on two or more sites, the Applicant must follow the steps in regulation 15.
Regulations 37 and 38 read with regulation 81	Conditions of approval	The Applicant (as distinct from the EAP), is required to ensure that the conditions subject to which the application is granted are met, both during the construction phase and once the listed activity commences. (For instance, as a condition of authorisation, the Applicant may have to provide periodic audit reports, indicating the current level of compliance and describing any action that may need to be taken to mitigate the effects of any non-compliance.)[29] The Regulations therefore also ensure that compliance by holders of environmental authorisations with environmental conditions imposed on them is monitored and can be enforced using powers in NEMA. Failure to comply with a condition is a criminal offence.[30]
Chapter 4	Amendments	An Applicant may apply for an authorisation to be amended.[31] If the amendment is non-substantive, then the Applicant can expect the authority to decide on the application promptly. If it appears to be a substantive amendment and it appears that public participation is warranted, the Applicant must undertake a public participation process. If it appears that there will be a significant impact on the environment, then the Applicant may be directed to submit an entirely new application.[32]
Chapter 5	Exemptions	An Applicant who wishes to apply for an exemption from a provision of the regulations must follow the steps prescribed in Chapter 5. An applicant may be exempted from a provision relating to the PPP only if the rights or interests of other parties are unlikely to be adversely affected.
Chapter 7	Appeals	An Applicant may appeal, either against the refusal to grant an authorisation or against the conditions upon which the authorisation was granted. The Applicant must comply with the procedures and time-frames set out in Chapter 7.

[29] Regulation 38.
[30] Regulation 81.
[31] Regulation 40.
[32] Regulation 42.

LEGISLATION	REQUIREMENTS	IMPLICATIONS
Bill of Rights		
Constitution section 24	"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."	All parties to the EIA process have a duty not to infringe other persons' rights in terms of section 24. The Applicant must ensure that while the development incorporates measures that prevent or control environmental pollution or degradation, it also maximises the positive environmental impacts. There must be an equitable balance between the rights of the applicant and the broader public. In this regard, the consideration of need and desirability is critical as it requires the strategic context of the development to be considered with the broader societal needs and public interest.
Constitution section 25	Right to property	The Applicant must ensure that his or her development proposal does not unlawfully deprive any person of his or her property. The Applicant must check whether any land claims for the property in question are pending.
Constitution sections 26 and 27	Right of access to adequate housing and to sufficient food and water	If a development proposal involves the relocation of people or affects their access to food and water, the Applicant must take account of these constitutional rights.
Constitution section 32	Right of access to information	This right is given effect to by PAIA which is discussed further below. The Applicant must comply with PAIA if the decision-maker or an I&AP makes a request for information in accordance with PAIA. The Applicant is entitled to request information from the decision-maker provided the procedures set out in PAIA are followed.
Constitution section 33	Right to administrative action that is lawful, reasonable and procedurally fair	All parties are entitled to expect just administrative action. The right is further given effect to by PAJA which is discussed further below.
Functional areas of national, provincial and local government competence		
Constitution sections 44 and 104 and Schedules 4 and 5		The Applicant must ensure that organs of state in other spheres of government are notified of any application that affects that organ of state's mandate. All organs of state whose mandate will be affected by the proposed development must be registered as I&APs. For example, water resources are a national competence and DWA must be notified while the disposal of waste is a local government competence and the relevant municipality must be notified.

LEGISLATION	REQUIREMENTS	IMPLICATIONS
Cooperative governance		
Constitution	Take cognisance of principles of cooperative government and intergovernmental relations in decision-making	No specific implications for Applicant except that Applicant must ensure that all organs of state that are affected by the application are notified and registered as I&APs in terms of the EIA regulations.
Promotion of Administrative Justice Act		
PAJA	Gives effect to constitutional right to just administrative action	Applicant has a right to just administrative action in the course of his or her application.
Section 3	Sets out the requirements for procedurally fair administrative action	An Applicant's rights would be affected in the following circumstances: • where adequate notice of the nature and purpose of the proposed administrative action has not been given; • where a reasonable opportunity to make representations has not been given; • where there has been no clear statement of the administrative action; • where adequate notice of the right to a review (or to an internal appeal) has not been given; and • where adequate notice of the right to request reasons has not been given.
Section 6	Sets out the grounds for review of administrative action	An Applicant can approach a court to review any administrative action by either the competent authority or a commenting authority. The grounds for doing so include: • the failure of the competent authority to comply with a mandatory and material procedure or condition; • the action was procedurally unfair; and • the action amounts to a failure to take a decision within the prescribed time period or, if no period is prescribed, without an unreasonable delay. If conflicts arise between organs of state during the course of an EIA process (for example, between a competent authority and a commenting authority), these must be resolved through conflict resolution procedures such as mediation, conciliation or arbitration rather than by legal action.

LEGISLATION	REQUIREMENTS	IMPLICATIONS
Promotion of Access to Information Act		
Part 2 of PAIA	Access to records of public bodies	An Applicant can request access to a record (which includes any recorded information regardless of form or medium) held by the decision-maker or any of the commenting authorities or any public body during the course of the application regardless of whether it was created by the authority concerned. An Applicant is not required to give reasons for the request. When requesting information from a public body, the Applicant must comply with the correct form for a request. A request to a public body can even include a record that contains personal information about the requester/ Applicant. Following a request, access to information is not necessarily automatic. For example, the information officer of a public body must refuse a request if: • the Applicant would be obtaining the trade secrets of a third party; • the Applicant would be obtaining other information that would cause harm to the commercial or financial interests of a third party, or • the Applicant would be obtaining information that has been supplied by the third party, the disclosure of which could be disadvantageous or prejudicial to negotiations or commercial competition.[33] For example, if an I&AP or competitor of the Applicant has written to the competent authority explaining why its own patented machinery is superior to that envisaged for use in the applicant's own proposal, then the Applicant will not be allowed to use the provisions of the Act to obtain information about the technical specifications of its competitor's machinery. Commercial confidentiality is however not a basis for refusing access to information about the results of environmental tests and investigations that reveal a serious environmental or public safety risk.[34] In some circumstances the public body has a discretion and may refuse to disclose the information. These include where the disclosure would be likely to prejudice or impair the security of public safety systems, plans or procedures.[35] For example, a public body may refuse to disclose information about a National Key Point situated nearby the development if that would be likely to prejudice public safety. If a record contains both information to which the Applicant is entitled and information to which it has no right, the public body must grant access to a record which has had the confidential portions removed.

[33] Section 36(1).
[34] Section 36(2).
[35] Section 38(b).

LEGISLATION	REQUIREMENTS	IMPLICATIONS
Promotion of Administrative Justice Act		
Part 3 of PAIA	Access to records of private bodies	The Applicant may request access to records of other private bodies during the course of an application but only where the records are required in order to exercise or protect a right. Similarly the decision-maker or a commenting authority in an application can request information from an Applicant who is a private body. The circumstances in which a request for information from a private body must be refused are set out in Chapter 4 of Part 3 as well as the circumstances in which a request for information may be refused. The latter includes where the record contains commercial or scientific information, the disclosure of which would be likely to cause harm to the commercial or financial interests of the body.[36] Such record may however not be refused insofar as it consists of information about the results of any product, environmental testing or investigation carried out by the private body and its disclosure would reveal a serious public safety or environmental risk.[37] As with public bodies, the fact that a record contains confidential portions does not excuse a private body from granting access to the rest of the record.
Public participation requirements		
Chapter 6 of the EIA Regulations	Identification and notification of I&APs	One of the most important tasks the EAP must fulfil is to ensure that the required level of public participation takes place. The EAP must ascertain who all the potential I&APs are and ensure that all of these parties have been given notice of the application. The notice requirements are prescribed in Regulation 56. For instance:
Regulation 56	Notice Boards	• There must be a notice board conspicuously placed at the boundary of the proposed site and at any alternative site. The board must contain specified information and must be of a certain size. If the activity in question is a linear activity or ocean based activity, the notice board requirements may be inappropriate and other arrangements may be agreed upon with the competent authority.
	Written Notice	• Written notice must be given to owners or occupiers that are either adjacent or within 100 metres or who may be directly affected by the proposed activity. • Written notice must also be given to the local councillor, the municipality and any organ of state having jurisdiction over any aspect of the activity.
Regulation 57	Advertisement	An advertisement must be placed in at least one local newspaper or, if the impact of the activity will extend beyond the boundary of the local municipality, in at least one provincial newspaper or national newspaper, or in the Government Gazette. The EAP must undertake advertising for the following: a Basic Assessment, the scoping phase of an EIR, applications for exemption and applications for substantive amendments to authorisations.

[36] Section 68(1).
[37] Section 68(2).

LEGISLATION	REQUIREMENTS	IMPLICATIONS
Regulation 62	Maintain a register of I&APs	The EAP must open and maintain a register of all I&APs. The people listed on the register will include those who have attended meetings or have submitted written comments as well as those who have requested that their names be included on the list. In addition, all organs of state with jurisdiction in respect of the activity must be listed as I&APs.
	Inform I&APs of decision	The Applicant is also obliged to inform the registered I&APs when the authority makes its decision and must provide the reasons for the decision and remind the I&APs that an appeal may be lodged. If the Applicant is going to appeal a decision, a copy of the notice of appeal must be served on each person and organ of state who was a registered I&AP and these parties must also be notified of information regarding where and for what period the appeal submission will be available for inspection.
Regulation 58(2).	Participation by I&APs	The EAP has the responsibility to ensure that before any report (compiled in terms of the EIA Regulations), is submitted to the authorities, the registered I&APs have been given access to it and have been given an opportunity to give written comment.
Regulations 24(b)(ii), 30(a), 32(2)(e)(iv),58(4).	Written comments from I&APs	Any written comments must accompany the report in question when it is submitted to the authority.
Regulation 59	Attach comments to reports	Any comments from I&APs on a report which is to be submitted to the competent authority may be attached to the report without recording those comments in the report itself.
Regulations 23(2)(f)(iv), 29(1)(h)(iv), 32(2)(e)(iii) and 33(2)(i).	Summaries of issues raised	Summaries of the issues raised during the PPP must however be included in the Basic Assessment Report, scoping and EIA Report as well as in specialist reports and reports on specialised processes.
Regulation 51(2)	Exemptions from public participation procedures	There can be no exemption from a provision requiring or regulating a public participation process unless it can be shown that the rights or interests of other parties are not likely to be adversely affected by the proposed exemption. Furthermore, in terms of the minimum requirements applicable to EIA's in section 24 of NEMA, some level of public participation will always be required.

3.1.2 Legal framework applicable to the decision-maker

LEGISLATION	REQUIREMENTS	IMPLICATIONS
Bill of Rights		
Constitution Section 24	"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."	The provisions of the Bill of Rights are binding on decision-makers.[38] They must ensure that their decisions are in keeping with the environmental right and promote an environment that is not harmful to health or well-being.
Constitution Section 25	Right to property	A decision may not have the effect of unlawfully depriving any person of property.
Constitution Sections 26 and 27	Right of access to adequate housing and to sufficient food and water	A decision-maker must give effect to the progressive realisation of the rights to adequate housing and food and water within that decision-maker's mandate.
Constitution Section 32	Right of access to information	A decision-maker must disclose information requested by the Applicant or I&APs unless that information is protected by a law such as PAIA (this is discussed further below).
Constitution Section 33	Right to administrative justice	In order to protect the Applicant's right to administrative justice, decisions taken must be lawful, reasonable and procedurally fair and where the Applicant requests reasons for a decision that adversely affects his or her rights, the decision-maker must provide written reasons for the decision. NEMA also requires that decisions be taken in an open and transparent manner, and access to information be provided in accordance with the law.[39]
Functional areas of national, provincial and local government competence		
Constitution sections 44 and 104 and Schedules 4 and 5		The decision-maker must ensure that where the development proposal involves functional areas administered by other state departments, whether national or provincial, it consults with those other departments during the course of deciding the application. A decision-maker should also take into account laws administered by other departments in formulating the conditions subject to which the authorisation will be granted.

[38] Section 8(1).
[39] Section 2(4)(k).

LEGISLATION	REQUIREMENTS	IMPLICATIONS
Cooperative governance		
Constitution Chapter 3	Take cognisance of principles of cooperative government and intergovernmental relations in decision-making	Decision-makers are required to take cognisance of the principles of cooperative government and intergovernmental relations set out in the Constitution in deciding applications for environmental authorisation. In practice this means that decision-makers must consult with and take into account the comments of other organs of state when deciding the application. The constitutional principle that organs of state have a duty to cooperate also means that, to the extent possible, an application for environmental authorisation must be aligned with the application processes for other authorisations that an Applicant is required to obtain (such as approval for re-zoning and subdivision applications), and *vice versa*. NEMA provides that in preparing environmental implementation plans or environmental management plans, national departments exercising functions which may affect the environment[40] and national departments exercising functions that involve the management of the environment[41] are required to take into consideration every other such plan already adopted in order to achieve consistency.[42] Among the purposes of these plans is the coordination and harmonisation of the policies, plans, programmes and decisions of the various national departments and provincial and local spheres of government. Departments are required to exercise their functions in accordance with the environmental implementation plan or the environmental management plan that they have adopted.
EIA Regulations Regulation 6.		The EIA Regulations take the constitutional obligation for cooperative governance further by placing an obligation (in certain circumstances) on the competent authority to enter into a written agreement with other organs of state having jurisdiction. This duty applies where both sets of legislation require an application to be made and the information that must be given or the processes that must be followed are "substantially similar". If this is the case, then steps must be taken to sign a written agreement to co-ordinate the respective requirements and to avoid the duplication of tasks or processes.
NEMA section 2(4)(m)	Actual or potential conflicts of interest between organs of state should be resolved through conflict resolution procedures	Actual or potential conflicts of interest between organs of state should be resolved without recourse to litigation where possible. The Intergovernmental Framework Relations Act, 13 of 2005 establishes a framework for the national government, provincial governments and local governments to promote and facilitate intergovernmental relations. It also provides for mechanisms and procedures to facilitate the settlement of intergovernmental disputes. In terms of the Act, all organs of state must make every reasonable effort to avoid intergovernmental disputes and to settle intergovernmental disputes without resorting to judicial proceedings.[43]

[40] Set out in Schedule 1 of NEMA.
[41] Set out in Schedule 2 of NEMA.
[42] Section 11(4).
[43] Section 40(1).

LEGISLATION	REQUIREMENTS	IMPLICATIONS
Promotion of Administrative Justice Act		
PAJA	Gives effect to the constitutional right to just administrative action.	The decision-maker must ensure that adequate notice of any right of review or internal appeal, where applicable, is given.[44] A person affected by the decision must also be given adequate notice of the right to request reasons in terms of the Act.[45] Where a person whose rights have been materially and adversely affected by the decision, requests written reasons for the decision, the decision-maker must, within 90 days after receiving the request, give that person adequate reasons in writing for the decision.[46] A decision-maker who fails to furnish adequate reasons will be presumed, when the administrative action is judicially reviewed, to have taken the action without good reason.[47] Decision-makers must therefore be aware that they may be requested to provide written reasons for any administrative action, and that they will be required to provide the reasons in accordance with the procedure stipulated in PAJA. The decision-maker may however depart from the requirement to furnish adequate reasons if it is reasonable and justifiable in the circumstances.[48] In determining whether such departure is reasonable and justifiable, the decision-maker is required to take into account all relevant factors including the object of the empowering provision, the nature, purpose and likely effect of the decision concerned and the importance of the purpose of the departure.[49]

[44] Section 3(2)(b)(iv).
[45] Section 3(2)(b)(v).
[46] Section 5(2).
[47] Section 5(3).
[48] Section 5(4)(a).
[49] Section 4(b).

LEGISLATION	REQUIREMENTS	IMPLICATIONS
Promotion of Access to Information Act		
Part 2 of PAIA	Access to records of public bodies	The decision-maker in an application for environmental authorisation is a public body and must therefore ensure that a person requesting access is allowed such access provided that the procedural requirements in the Act relating to a request for access are complied with. This includes that the request for access be made to the information officer of the department concerned in the prescribed form at his or her address or fax or electronic mail address. The information officer of the department must as soon as is reasonably possible, but in any event within 30 days, after a request for information is received, decide whether to grant the request and notify the requester of the decision.[50] A department may refuse a request for access to a record if the request is manifestly frivolous or vexatious or if the work involved in processing the request would substantially and unreasonably divert the resources of the department.[51] Information officers of public bodies, such as the decision-maker[52] are charged with ensuring compliance with the provisions of PAIA, and are assisted by deputy information officers, to be designated for that purpose.[53] Persons who make requests for information ("requesters") are entitled to records of public bodies where they comply with the procedural requirements of PAIA and access to the record is not refused in terms of any ground for refusal in terms of PAIA.[54] Public bodies are obliged to assist requesters to obtain information in accordance with the procedure laid down in PAIA.[55] Various duties are imposed upon public bodies under PAIA, including publishing a manual containing detailed information about the body and the information held by it.[56]
Public participation requirements		
		The decision-maker has a duty to ensure that the Applicant or EAP complies with the requirements of NEMA and the EIA Regulations relating to public participation processes.

[50] Section 25(1).
[51] Section 45.
[52] Section 1 (definition of "information officer") specifies who the information officers of public bodies are.
[53] Section 17.
[54] Section 11.
[55] Section 19(1).
[56] Section 14.

3.1.3 Legal Framework applicable to: interested and affected parties

LEGISLATION	REQUIREMENTS	IMPLICATIONS
The EIA Regulations		
Regulations 56 and 57	Participation by I&APs	I&APs are entitled to participate in the process of considering and granting the environmental authorisation for a listed activity. Names and addresses of I&APs must be specified in a register and an applicant or EAP must give access to the register to any person who submits a request for access to the register in writing. I&APs may object to a decision to grant or refuse an environmental authorisation.
Bill of Rights		
Constitution section 24	"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."	I&APs may challenge a decision by a competent authority that they believe infringes their right to an environment that is not harmful to their health or well-being.
Constitution section 25	Right to property	A development proposal must not unlawfully deprive an I&AP of his or her property.
Constitution sections 26 and 27	Right of access to adequate housing and to sufficient food and water	Where a development proposal involves the relocation of people or affects their access to food and water, their constitutional rights must be protected.
Constitution section 32	Right of access to information	An I&AP may request information in accordance with PAIA (discussed below).
Constitution section 33	Just administrative action	I&APs have a right to just administrative action which is guaranteed by the Constitution. This right is also given effect to by PAJA. A decision by a competent authority that is not lawful, reasonable or procedurally fair may be challenged. I&APs have a right to be provided with written reasons for administrative action that has adversely affected their rights. PAJA is further discussed below.

LEGISLATION	REQUIREMENTS	IMPLICATIONS
Functional areas of national, provincial and local government competence		
Constitution sections 44 and 104 and Schedules 4 and 5		All organs of state whose mandate will be affected by the proposed development must be registered as I&APs.
Co-operative governance		
Constitution Chapter 3	Principles of co-operative government and intergovernmental relations in decision-making	A failure by any organ of state to work with another relevant one in mutual trust and good faith during an EIA process may be challenged by I&APs.
Promotion of Administrative Justice Act		
PAJA	Just administrative action.	PAJA provides I&APs with a procedure in terms of which they can request reasons for a decision (administrative action) where their rights have been infringed. A failure to provide these reasons when requested may lead to a presumption (if such a decision is taken on review), that the decision was taken without good reason.[57] PAJA stipulates a number of grounds on which I&APs may bring an application for a judicial review of a decision. The grounds are, amongst others, that the decision maker was biased or not empowered to make the decision, he or she took irrelevant considerations into account when making a decision, and that the decision was not rationally connected to the purpose for which it was taken.[58]
Promotion of Access to Information Act		
Parts 2 and 3 of PAIA	Access to information	I&APs may rely upon the provisions of PAIA to request access to a record (which includes any recorded information regardless of form or medium) held both by the competent authority (a public body) and by the Applicant/EAP (the Applicant may be a private or public body) in an application for environmental authorisation. This applies regardless of whether the record was created by the authority concerned. Following a request, access to information is not necessarily automatic. For example, the information officer of a public body must refuse a request if it involves – • the I&AP obtaining the trade secrets of a third party; • other information that would cause harm to the commercial or financial interests of a third party, or • information that has been supplied by the third party, the disclosure of which could be disadvantageous or prejudicial to negotiations or commercial competition.[59]

[57] Section 5(3).
[58] Section 6(2).
[59] Section 36(1).

LEGISLATION	REQUIREMENTS	IMPLICATIONS
Promotion of Access to Information Act		
Parts 2 and 3 of PAIA	Access to information	Commercial confidentiality is however not a basis for refusing access to information about the results of environmental tests and investigations that reveal a serious environmental or public safety risk.[60] If a record contains both information to which the I&AP is entitled to have access to and information to which it has no right, the public body must grant access to a record which has had the confidential portions removed. I&APs may be refused access to information of a private body in certain circumstances laid down in PAIA, for example, where information is commercially sensitive. However, as is the case with public bodies, commercial confidentiality is not a basis for refusing access to results of environmental tests and investigations that reveal a serious environmental or public safety risk.
Public participation requirements		
EIA Regulations, Chapter 5, 6 & 7	Deals with public participation processes and an appeals process for participation by I&APs.	The decision-maker may reject a basic assessment report if it is based on an insufficient level of public participation. Where there is an application for a substantive amendment of an environmental authorisation, or where a decision-maker intends amending an environmental authorisation or is considering withdrawing an environmental authorisation, the necessary and appropriate public participation processes as set out must be conducted. In considering an application for an exemption, the competent authority must before deciding the application request that the Applicant conduct at least a public participation process in circumstances where the rights or interests of other parties are likely to be adversely affected by the proposed exemption.[61] Registered I&APs are entitled to comment in writing on all written submissions made to the decision-maker by the Applicant.[62] The EAP must ensure that the comments of I&APs are recorded in reports submitted to the competent authority.[63]

[60] Section 36(2).
[61] Regulation 53(4).
[62] Regulation 58.
[63] Regulation 59.

4 EIA Process Guidelines for the Sectors

In this section of the guideline practical aspects of the EIA Regulations are addressed. It was determined through consultation with provincial authorities and other state organisations that practical advice on aspects of the EIA process where difficulties have been experienced would be most useful for the purposes of this sector guideline. The focus in this section is on specific aspects or issues in relation to the EIA process that are known to be complex to deal with, that can prove problematic or where an explanation of requirements would be beneficial. Examples from the various sectors are used to illustrate and clarify particular aspects of the EIA process and the requirements of the EIA Regulations.

This section of the guideline covers the following:

1. *Definition of the sectors*: This section provides a description of each of the sectors covered in the guideline.

2. *Determining whether environmental authorisation is needed*: This section provides guidance on how to determine whether an environmental application needs to be made for a proposed project or parts / elements thereof. It also deals with the relationship between other approvals, authorizations or permits that may be required and the EIA process. The question of exemptions is also dealt with in this section.

3. *Fulfilling responsibilities required by the EIA Regulations:* Authorities may fulfil a number of roles in the EIA process. Whilst the competent authority is the decision-maker, other authorities may be an applicant or a commenting authority. This section explains the responsibilities that must be fulfilled within each of these roles to meet legal requirements.

4. *Making use of guidelines in the EIA process*: In this section guidelines that are useful for the EIA process are listed together with a brief explanation of their content. It is a legal requirement to make reference to guidelines that are applicable to the EIA process.

5. *Identifying issues and alternatives*: The identification of issues and alternatives is a critical step in the EIA process. If the identification of issues and alternatives is not comprehensive, this will impact negatively on the impact assessment, since the scope thereof will be incorrectly defined. Practical advice and examples is provided in this section.

6. *Developing Terms of Reference for specialist studies*: It is important to ensure that specialist studies address the correct issues in relation to the project and its location. Thus the questions that specialists need to address must be carefully detailed. The way in which the specialist terms of reference should be approached is explained in this section.

7. *Undertaking public participation*: In this section, the purpose of public participation is briefly described and unique requirements in respect of the different sectors are provided.

8. *Assessing the significance of impacts*: The approach to impact evaluation is discussed in this section with the emphasis on using an objectives-based approach. Criteria that can be applied in this regard are given. The use of the NEMA principles in the assessment is also addressed.

9. *Developing an Environmental Management Plan*: An overview of the purpose and content of the Environmental Management Plan (EMP) is given in this section.

4.1 Definition of the sectors

4.1.1 The Non-Linear Development Category

1. ***Large-scale property development***: The large scale property development sector involves activities that are proposed for a sizeable property. This may include residential, commercial, industrial and resort development or any combination of these. The EIA Regulations place a threshold of 20ha whereby developments of this size or larger would be subject to Scoping and EIA. For the purposes of this guideline, this threshold has been applied to define "large scale."

2. ***Social infrastructure***: These projects include those related to the provision of basic services and housing specifically to poor communities. Such projects may involve large tracts of land and could also encompass linear developments such as water supply pipelines. The development of a water supply system from groundwater, for example, would constitute a project in this category.

3. ***Energy***: This category of project is concerned with the facilities for the production, transmission and distribution of electricity. On the production side, it includes power stations. Both renewable and non-renewable electricity generation facilities are included. Transmission would typically involve power lines and thus this aspect also falls into the category of linear developments. Activities involving fuel retail outlets, the above or below ground storage of fuels and stockpiles of coal are not included.

4. ***Agri-industry***: In accordance with the definition in the EIA Regulations, these projects involve the processing, production, manufacture, packaging or storage of agricultural produce. Battery farm operations that are under roof are also included in this category.

4.1.2 Linear development

This refers to any development that takes the form of a line or that "has the form of a line" across the landscape. Thus it includes roads, railway lines, pipelines and power lines. It would also include bulk infrastructure such as water supply lines and sewer lines.

4.2 Determining whether an application is necessary

The first stage in any application process must be to determine whether any identified activities apply to the proposed development and, therefore, whether an application for an environmental authorisation is required. This involves answering three questions:

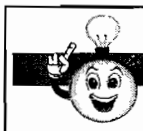
1. Does the proposed project or development involve any activity that appears in Listing Notice 1 (GN R 386) or Listing Notice 2 (GN R 387)?

2. If the proposed project or development involves a listed activity, does it fall within the applicable threshold provided in the Listing Notice?

3. Does the way that the words are used in describing the listed activity mean that the proposed activity does not fall within the listed activity?

With respect to point 3, it is important to ensure a clear understanding of the meaning of words used in the description of an activity. Some terms are defined in the legislation and therefore reference must be made to NEMA and the EIA Regulations. Definitions are provided in section 1 of NEMA,

the definition of "commence"[64] being of particular relevance. In respect of the EIA Regulations reference must be made to Regulation 1 - Interpretation and the definitions provided in the Listing Notices. If the words used in describing a listed activity are not defined in any of the above legislation, then the ordinary, dictionary definition of the words would be applicable.



IMPORTANT POINTS TO REMEMBER

- Always check definitions and thresholds to assist in determining whether your proposed project requires environmental authorisation or not.
- If you are uncertain as to whether you need to apply, check with the relevant competent authority. Obtain written confirmation of their opinion. Do not accept the opinion of other government Departments or the municipality about whether you need environmental authorisation as being "the last word."
- Remember that your proposed project could involve more than one Listed Activity. Only one application needs to be lodged but you must check both Listing Notices to ensure ***all*** relevant activities are included.
- If your project involves activities from Listing Notice 1 and from Listing Notice 2, your entire application must be undertaken in accordance with the process applicable to Listing Notice 2 activities, namely, Scoping and EIA.
- Environmental authorisation is needed before any Listed Activity may commence!

If an Applicant is uncertain about whether the proposal falls within the ambit of the EIA Regulations, he or she should consult the relevant competent authority's guideline documents or approach the authority for advice. It is important to bear in mind that it is the responsibility of the person or Applicant to which a law applies to ensure compliance with that law. Therefore, if after consulting the competent authority the situation remains unclear, the Applicant should consider obtaining a legal opinion from an environmental legal expert. This information could then be provided to the competent authority with a view to obtaining finality on the matter. The competent authority, if uncertain could also elect to obtain a legal opinion. Whilst other government departments and municipalities may venture an opinion as to whether the EIA Regulations apply or not, their opinion cannot be taken as definitive, as they have no jurisdiction in terms of the EIA Regulations.

It is important to ensure that the application includes all of the listed activities for which authorisation is required. Failure to do so would result in a partially authorised development (assuming authorisation is granted). Furthermore, if the proposed development involves activities from Listing Notice 1 and 2, then the entire application must be subject to the scoping and EIA process. Essentially the Listed Activities fall into three categories:

1. Those that involve the construction or establishment of a project or facilities: These can be seen as activity based, for example, all of those activities that fall under item 1 in Listing Notices 1 and 2. The Listed Activities that are concerned with decommissioning also fall into this category;

2. Those that involve activities within areas that are particularly environmentally sensitive or valuable: Examples are those listed activities that make reference to the removal of indigenous vegetation or that will take place within a specified distance from the high-water mark of the sea; and

[64] Commence when used in chapter 5 of NEMA means: "the start of any physical activity, including site preparation and any other activity on the site in furtherance of a listed activity or a specified activity, but does not include any activity required for the purposes of an investigation or feasibility study as long as such investigation or feasibility study does not constitute a listed activity or specified activity."

3. Those that require environmental permits: Any activity that requires an environmental permit in respect of pollution, waste or emissions falls into this category.

PRACTICAL EXAMPLES

- If it is necessary to store fuel on site (e.g. for generators, hot water boilers or refuelling of vehicles), this may constitute a Listed Activity, depending on whether it is to be stored in an above ground facility (30 000 litre threshold) or below ground (no threshold).
- If hazardous waste is to be stored on site on a temporary basis, this is a Listed Activity under Listing Notice 1, no matter what volume is involved. A permanent hazardous waste storage facility is a Listing Notice 2 activity.
- If a back-up generator is needed, determine whether this is subject to a permit under air pollution legislation (including municipal bylaws). In the event that a permit is needed, the generator must be included in the application.
- If effluent will be generated and discharged to a sewer, this may be subject to written consent (permit) from the municipality. In the event of discharging effluent to a dam, water course, water body or the sea, a DWA permit will be required. Effluent discharge will therefore constitute a Listed Activity as it is subject to a permit (Activity 1(e) in Listing Notice 2 applies to activities requiring a new permit, whereas Activity 25 in Listing Notice 1 applies to activities that require a change to an existing permit).

Sometimes what appears to be an insignificant or small element of a project may be regarded as a Listed Activity. Examples are given in the box alongside. This demonstrates the need to check all the activities in both Listing Notices to ensure that the application includes all of the relevant activities.

The process of identifying the activities which must be included in the application can be assisted by a systematic analysis of the items that are required for the project to function. For example, flow charts of an industrial process can be useful in determining which Listed Activities are applicable. Similarly, a comprehensive analysis of the project inputs (e.g. raw materials, water, energy etc.) and outputs (wastes, effluent etc.) can also be of assistance in identifying the activities for which application is being made. Infrastructure requirements must also be considered, as these may also be Listed Activities. Reference should be made to the Activities and Impacts matrices (Annex C-G) as these could assist in identifying the activities that need to be included in the application. It is likely that some of the activities listed in Annex C – Linear Developments will be of relevance to most development proposals where infrastructure (e.g. stormwater pipelines, roads) needs to be provided.

It is important to always check the activities that relate to location, such as whether the project would take place close to a river or wetland or whether the proposed site has indigenous vegetation. If the location for the proposed development is within a coastal area, distance from the high water mark of the sea needs to be determined, since certain activities within 100m of the high water mark are subject to environmental; authorisation. Certain activities on coastal dunes and tidal rivers or estuaries are also listed (Refer to GNR 385 of April 2006). An example showing the determination of the activities for which environmental application must be made is given in Table 4 below, for a large-scale property development scenario involving mixed land uses on an undeveloped or "greenfields" site. Reference should be made to the legal matrix (Annex B) and the activities and impacts matrices (Annex C-G) to assist in clarifying whether an application is required and which activities must be included in the application.

TABLE 4: Determining the activities for which application must be made using large-scale property development as an example

QUESTIONS TO CONSIDER	RELEVANT LISTED ACTIVITIES
GN R386 – Listing Notice 1	
Relevant definitions	
"Infill development" means urban development, including residential, commercial, retail, institutional, educational and mixed use development, but excluding industrial development, in a built up area which is at least 50% abutted by urban development and which can be readily connected to municipal bulk infrastructure services. **"associated structures or infrastructure"** means any building or infrastructure that is necessary for the functioning of a facility or activity or that is used for an ancillary service or use from the facility; **"construction"** means the building, erection or expansion of a facility, structure or infrastructure that is necessary for the undertaking of an activity, but excludes any modification, alteration or upgrading of such facility, structure or infrastructure that does not result in a change to the nature of the activity being undertaken or an increase in the production, storage or transportation capacity of that facility, structure or infrastructure;	
Which listed activities are potentially relevant?	
The most obvious activity is: 16 – if the project will result in the transformation of undeveloped land to residential, mixed, retail, commercial, industrial or institutional use where such development does not constitute infill and where the total area to be transformed is bigger than 1 hectare. (NOTE: refer to GN 387 – Listing Notice 2 if the development will be larger than 20 ha).	
What built environment or land use elements will the development comprise?	1 (d) – if resorts, lodges, hotels or other tourism and hospitality facilities are to be established in a protected area.
	1(k) – if the project involves bulk transportation of sewage and water, including storm water, in pipelines with – (i) an internal diameter of 0.36 metres or more; or (ii) a peak throughput of 120 litres per second or more
	1(o) – if storage, recycling or treatment of general waste is needed (e.g. a waste yard on a large residential estate) which has a throughput capacity of 50 tons or more daily average measured over a period of 30 days.
	1 (p) – if the treatment of effluent, wastewater or sewage with an annual throughput capacity of 15 000m3 or more is needed.
What built environment or land use elements will the development comprise?	13 – if groundwater is to be abstracted at a volume that exceeds general authorisation. (NOTE: Reference must be made to the General Authorisation issued under section 39 of the National Water Act).
	18 – if the subdivision of land is involved.
	15 – if construction of road wider than 4m or with reserve wider than 6m excluding roads that fall within the ambit of another listed activity or which are access roads of less than 30 meters long, is required.
	19 – if there will be manufacturing, warehousing, bottling, packaging or storage facility outside industrial zone and more than 1000 square metres.
Will the project take place over several phases?	17- if the development will comprise more than one phase.

QUESTIONS TO CONSIDER	RELEVANT LISTED ACTIVITIES
GN R386 – Listing Notice 1	
Which listed activities are potentially relevant?	
Where will the project be located?	1(m) – if the project will involve any construction near river or stream.
	2, 3, 5 and 6 – if the project will be located within 100m of high-water mark of the sea.
	4 – if any part of the project will be located in floodplain, wetland, lagoon, lake or in-stream dam or if there is a river, stream, wetland, lagoon, lake or in-stream dam on the site.
	12 – if the development will result in the transformation or removal of indigenous vegetation of 3 hectares or more or any size where the transformation or removal takes place in a critically endangered or endangered ecosystem.
	20 – if the transformation of an area zoned for use as public open space or for a conservation purpose is involved
	23(c) – if the project will take place on a "brownfields" site where facilities that need to be decommissioned have caused or could potentially have caused contamination of land.
Will any emissions or pollution be generated?	25 – if the project involves expansion to existing facilities that hold a permit (e.g. existing sewage treatment plant) that controls emissions, pollution or waste, where the expansion will require a permit amendment.
GN R387 – Listing Notice 2	
Which listed activities are potentially relevant?	
The most obvious activity is: 2 – if the development is likely to be more than 20ha.	
What built environment or land use elements will be involved?	5 - if involving major road
Where will the project be located?	9 - within 100m of high-water mark 10 process or activity in a listed ecosystem
Will any emissions or pollution be involved?	1 - The construction of facilities or infrastructure, including associated structures or infrastructure, for - (e) any process or activity which requires a permit or license in terms of legislation governing the generation or release of emissions, pollution, effluent or waste and which is not identified in Government Notice No. R. 386 of 2006

4.2.1 Dealing with the need for other authorisations, approvals or permits

Authorisations that may be required under other legislation are discussed in this section. The order or sequence for obtaining these authorisations is also considered, as is the potential for streamlining of application processes. Applicants and EAPs need to look at a project as a whole and decide what authorisations (other than environmental) will be required and which other authorities will need to be approached. Reference should be made to the Legal Matrix (Annex A to this guideline) for assistance in identifying the need for other approvals, permits or authorisations.

Where various authorities are responsible for decision-making for different aspects of the same project, the Constitution requires that they must ensure that their actions are co-ordinated. The NEMA principles reinforce the concept of intergovernmental co-ordination in environmental matters. NEMA requires the competent authority to consult with every State department that administers a law relating to a matter affecting the environment when considering an application for environmental

authorisation.[65] Furthermore, the Minister or MEC may consult with any organ of state responsible for administering legislation relating to any aspect of an activity that also requires environmental authorisation.[66] In terms of section 24K, the Minister or MEC may after such consultation enter into a written agreement with the organ of State in order to avoid duplication in the submission of information or the carrying out of a process.[67]

DEBUNKING THE MYTHS

THE MYTH: An approval of a Guide Plan or Structure Plan means that development is a given and it can be assumed that it must be approved.

THE REALITY: In order for a proposed development to proceed, all relevant approvals must be obtained. If any one of these is refused, then the development may not proceed. It is not incumbent on any authority to issue an approval because another authority has done so. Put differently, each authority must apply its mind within the context of its mandate and make the decision accordingly. Land use decisions are based on different criteria to those applied by the environmental authority. All authorities are obliged, in terms of NEMA, to take account of environmental considerations in their decision-making process where there is potential for significant detrimental environmental consequences.

The EIA Regulations impose a stricter requirement in that Regulation 6 necessitates that where information or processes that are required by other legislation are substantially similar to those required in terms of the EIA Regulations, the Minister or MEC must take steps to enter into a written agreement with the relevant organ of state. Where a Minister or MEC considers an application for environmental authorisation that also requires authorisation in terms of other legislation, he or she may take account of, any process authorised under that legislation as adequate for meeting the requirements of integrated environmental management in NEMA provided that section 24(4)(a) and where applicable, section 24(4)(b) are given effect to in such process.[68]

If the carrying out of a listed activity or specified activity is regulated in terms of another law or a specific environmental management Act, then both authorities responsible for issuing the authorisations may exercise their powers jointly by issuing separate authorisations or an integrated environmental authorisation.[69] The competent authority may regard an authorisation in terms of any other legislation that meets all the requirements in section 24(4)(a) and, where applicable, 24(4)(b) to be an environmental authorisation in terms of Chapter 5 of NEMA.[70]

Whilst the legislation requires co-ordination between organs of state, this does not mean that they must all reach the same decision. Each organ of state operates within its own mandate and thus applies decision-making criteria that are relevant in the context of exercising this mandate. For example, land use decisions such as rezoning and sub-divisions should take account of spatial plans (such as the municipal SDP), infrastructure capacity, access, existing use of the site, surrounding land uses and the like.

It is incorrect to suggest that because one decision-maker has issued an approval, that other decision-makers should do the same. This applies even if the decision-makers are located within one government department. For example, the DEA may decide to authorise a major energy development, but the DWA may refuse to issue a water use licence because it has been determined that there is inadequate water available in the system. In this example, it must be noted that the DWA has a narrower or more focussed mandate (i.e. water resources) than the DEA (environment).

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[65] Section 24O(2).
[66] Section 24K(1).
[67] Section 24K(2).
[68] Section 24K(3)(b).
[69] Section 24L(1).
[70] Section 24L(4).

Water availability will be one of several factors that the DEA would consider when determining whether to authorise or refuse the development. The DWA would, however, make the decision based on matters directly related to water resources. Another possibility is that both DEA and DWA could decide to refuse the application because it is determined that limited water availability is such a significant issue that it constitutes a "fatal flaw". This decision would be based on considering the sustainability of water resources, the impacts on other water users and ecological issues.

PRACTICAL EXAMPLES

- **AGRI-INDUSTRY:** These types of developments might require change of land use approval (e.g. rezoning). More importantly, it may be necessary to obtain a number of environmental permits for waste streams or emissions. For example, if there is to effluent discharge to a river, a permit from DWA is required. If a boiler or furnace this may require a permit from the municipality or from DEA.
- **ENERGY:** Typically such developments would require a range of permits relating to air, liquid and solid pollutants or waste streams. A rezoning approval might also be needed. If agricultural land is involved, the Department of Agriculture will be a primary commenting authority and may also need to give approval if subdivision of agricultural land is required.
- **LARGE-SCALE PROPERTY DEVELOPMENT:** Normally such developments would involve some sort of land use application (e.g. rezoning or subdivision). Where subdivision of agricultural land is involved, approval from the Department of Agriculture is necessary.
- **SOCIAL INFRASTRUCTURE & HOUSING:** Most typically, land use approvals would be required (e.g. rezoning). If agricultural land is involved and this requires subdivision, it will be necessary to obtain approval from the Department of Agriculture.
- **LINEAR INFRASTRUCTURE:** Land use approvals may be required (e.g. rezoning). If agricultural land is to be traversed, it will be necessary to obtain approval from the Department of Agriculture if subdivision is needed. The crossing of streams, rivers or wetlands will in some circumstances constitute a water use, and thus requires DWA's permission.

The order in which particular applications should be submitted is not set or specified. In order for an organ of state to fulfil the obligation to take the NEMA principles (section 2) into account when making decisions that may significantly affect the environment, it makes sense to wait until the EIA process has been concluded or at least until the environmental information is to hand (BAR or EIAR), before making the decision. It would be difficult for those decision-makers to consider the environment meaningfully without the benefit of the information gathered during the EIA process. The competent authority's view on whether the environmental impacts can be successfully mitigated or not should also be considered, which means that decision-makers need to consult each other.

As a general "rule of thumb" the Applicant/EAP must apply for the various authorisations required by a project in an integrated way. The timing for commencing the different applications depends on the requirements of the project cycle. It is important for the professional team to review the approvals, authorisations or permits that may be required against the project programme to clarify what information will be available when. This will enable the appropriate timing for the lodging of various applications to be determined. For example, in the case of an agri-industry development where industrial effluent will be generated and disposed, it makes sense to apply for an effluent permit once it has been determined whether there will be on-site treatment of effluent, what treatment technology will be used and what quality of effluent will be achieved. A number of alternative treatment technologies may be assessed (which should form part of the alternatives assessment in the EIA process) before determining the most favourable option. Once the technology has been selected, it may then be appropriate to commence the effluent permit process. The authority to which the application must be submitted depends on whether the effluent will be discharged to a river, stream, dam or wetland, the marine environment or the municipal sewer.

The EAP must use common sense – for instance, if land needs to be rezoned before a particular industry can operate on the premises this process should be undertaken in parallel with the EIA. If

WORKED EXAMPLES

Example 1

One of the water uses requiring authorisation in terms of the National Water Act, 36 of 1998 (NWA) is the taking of water from a water resource (unless the water use in question is permissible as a continuation of an existing lawful water use or in terms of a general authorisation). By way of an example, in the case of a large scale property development (such as a golf course), a water use licence will be needed if water for the development is to be abstracted from a water resource (e.g. groundwater via boreholes), rather than being obtained from the water services provider. Thus, in order to proceed, this development will require a water use licence and an environmental authorisation.

How should these two application procedures be managed?

Neither NEMA nor the NWA specifies that a water use licence must be obtained before the environmental authorisation or *vice versa.* The decision-maker under the NWA will focus his or her decision on what effect the abstraction will have on the water resource or on other users. However, he or she must also apply the principles set out in section 2 of NEMA when making the decision. While it is not necessary for the decision-maker under the NWA to wait for environmental authorisation to be issued, all the environmental information generated by the EIA process must be available and considered prior to making the NWA decision. In practice, usually the environmental authorisation is granted subject to the Applicant obtaining a water use licence from DWA. From the competent authority's point of view, however, it would be beneficial for all of the information relevant to the water use application to be available, as this will be of assistance when consulting the DWA. Furthermore, such information will be beneficial to the competent authority in determining whether water availability represents a significant issue from an environmental impact point of view or not. As noted elsewhere in this guideline the two authorities do not need to make the same decision. Each authority must apply its own mind consider the potential impacts on the environment from their own perspective.

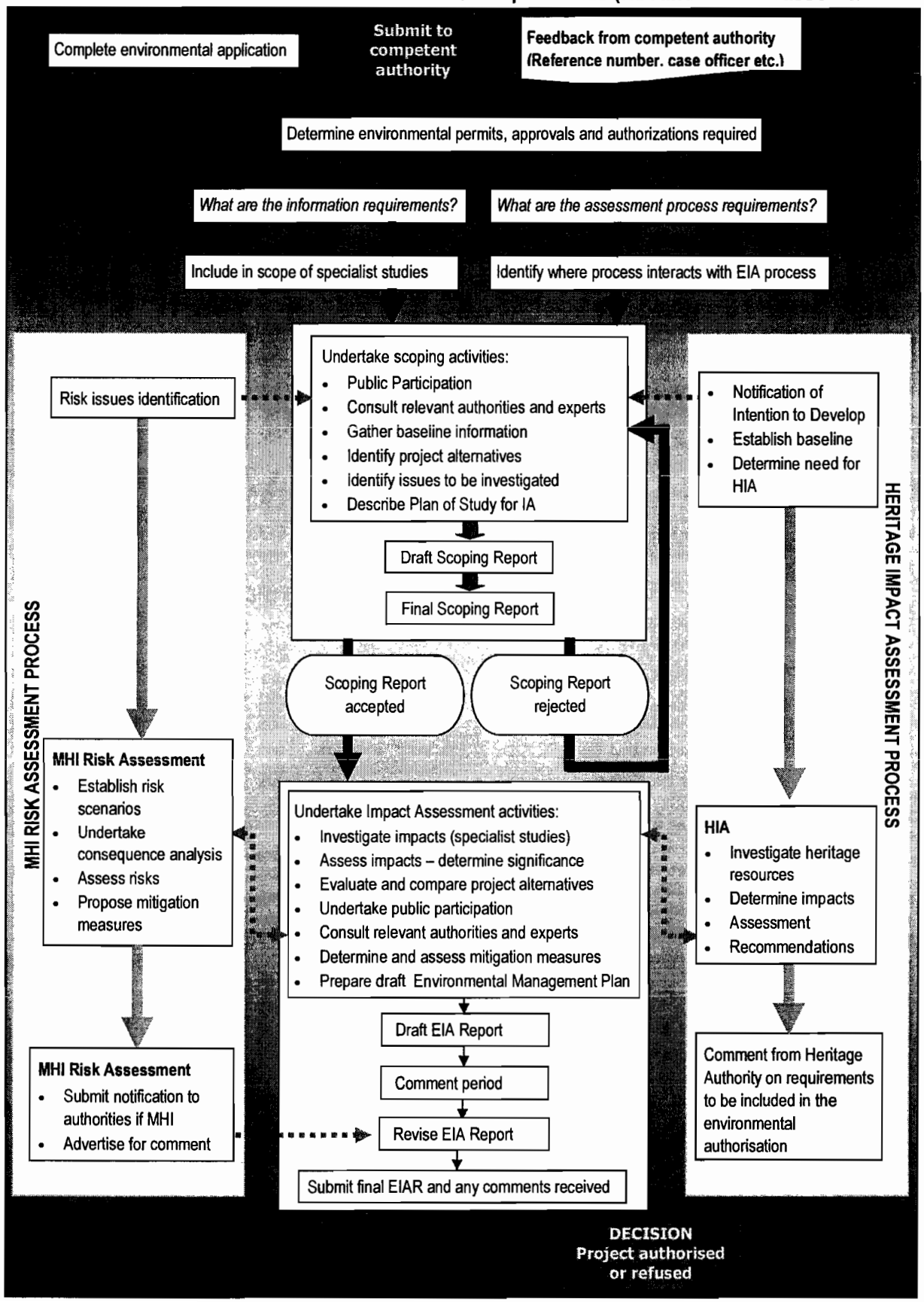
Example 2

Another example of parallel processes relates to the Development Facilitation Act, 67 of 1995 (DFA) procedure. The DFA Tribunal may approve a development application, but no construction can commence until an environmental authorisation has been obtained. The DFA Regulations contain their own provisions for environmental evaluation, but they merely incorporate the EIA regulations - they require that a scoping report is prepared in accordance with DEA's own EIA requirements, so the process is the same. Although it is not essential, it is advisable to obtain an environmental approval before approaching the DFA Tribunal.

the Applicant waits for the land to be rezoned before he or she appoints an EAP to undertake the EIA process there will be unnecessary delays. This is due to the fact that most authorities involved in land use decisions require the EIA process to be complete to enable them to take these factors into account in their decision-making process. From an EIA perspective, information from the rezoning application can be useful in gaining insight into whether the proposed project is aligned with spatial plans for the area and whether it is appropriate in the context of surrounding land uses. Furthermore, if the rezoning application is lodged when the EIA process commences, this will allow a streamlined approach in respect of the public consultation process required for the rezoning and environmental applications.

Of particular relevance in terms of co-ordination of the information requirements of various authorities are those circumstances where a Heritage Impact Assessment (HIA) or a Major Hazard Installation (MHI) Risk Assessment is required. These investigations would thus be treated as specialist studies within the EIA. The relationship between the EIA process and the HIA and MHI risk assessment, respectively, is shown in Figure 2.

FIGURE 2: Links between the EIA Process and other processes (HIA and MHI risk assessment



Section 38 of the NHRA lists various categories of development for which heritage input is required. In addition, NEMA requires that an investigation, assessment and evaluation of the impact of any proposed listed or specified activity on any national estate referred to in section 3(2) of the NHRA, be included in an environmental application, excluding the national estate contemplated in section 3(2)(i)(vi) and (vii) of that Act.[71] Where heritage issues are relevant it must be borne in mind that the need for a HIA in terms of section 38 of the NHRA is only one consideration. It may also be necessary to obtain a permit from the relevant heritage resources authority under certain circumstances, for example, if any change to a national or provincial heritage resource[72] or to any heritage objects[73] or a structure older than 60 years,[74] is envisaged.

Whether heritage resources will be an issue requiring investigation or not, will be determined by the location of the project, namely whether there are any heritage resources on the site or its surroundings that could be affected by the development. It must be noted that this could include visual impact issues. For example, if a road which includes bridges is to be constructed and there are important historical buildings in the vicinity of the bridges, the visual impact of these structures in the context of the historical buildings will require investigation. Similarly, if electricity transmission lines will traverse a cultural or scenic landscape, the visual and sense of place impacts will require consideration.

Any person wishing to undertake a category of development listed in section 38 of the NHRA must at the very 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. The heritage resources authority will determine whether an HIA is required on the basis of the information provided in this Notification of Intent to Develop (NID).

IMPORTANT POINTS TO REMEMBER

- **Heritage Impact Assessment:** The need for a HIA is not only determined by the type of development being proposed and whether this is listed in section 38(8) of the NHRA. Heritage resources could arise as an issue in respect of any type of development, which means that a specialist study on heritage issues (i.e. a HIA) will be needed. Thus, a HIA may be required for any of the development sectors that are covered in this guideline.
- **MHI Risk Assessment:** Typically one would consider a MHI risk assessment to be associated with industrial projects. In the context of this sector guideline, a MHI risk assessment may be required for most energy sector developments. Agri-industry is another sector where a MHI risk assessment may be a necessary study (e.g. use of ammonia for cooling purposes). It must be borne in mind, however, that a MHI risk assessment may be required for any development where dangerous goods would be used and/or stored. For example, a large-scale property development where there will be storage of diesel (e.g. for refuelling vehicles; for use in a stand-by generator) or liquid petroleum gas for restaurants may require a MHI risk assessment depending on the location of the project and the volumes of the dangerous good involved.

A MHI (Major Hazard Installation) risk assessment will always be required if there is a likelihood that any facility within the development could pose a major hazard. Although this is not specifically defined in a quantitative way in the MHI Regulations (GNR 692 of 30 July 2001), a MHI is described as being any installation or quantity of substance "which may pose a risk that could affect the health and safety of employees and the public"[75]. Whilst this definition is general in nature, the typical practice in South Africa is to

[71] NEMA Section 24(4)(b)(iii). The national estate referred to in the relevant section of NHRA comprises objects of scientific or technological interest (section 3(2)(i)(vi); and (in terms of section 3(2)(i)(vi)) - books, records, documents, photographic positives and negatives, graphic, film or video material or sound recordings, excluding those that are public records as defined in section 1(xiv) of the National Archives of South Africa Act, 1996 (Act No. 43 of 1996) .

[72] NHRA section 27(18)

[73] NHRA section 32(13)

[74] NHRA section 34(1)

[75] Regulation 2(1)

use international standards (usually those applied in the UK) to determine if a facility classifies as a MHI or not. In the case of the categories of projects that are covered in this guideline it is important not to assume that a development (e.g. a social infrastructure project or large-scale property development) that would not ordinarily be associated with the notion of a MHI, does not have any facilities that could prove to be a MHI (e.g. fuel storage). In terms of linear development, a MHI risk assessment is likely to be necessary where a dangerous good is to be conveyed in a pipeline.

Important points to note for projects where a MHI risk assessment is required are as follows:

- Whilst the MHI Regulations do not make provision for an approval or permit to be issued, if a facility is shown to be a MHI, it must be registered as such with the national and provincial Department of Labour, as well as the municipality (Fire Department or Disaster Management).

- The Department of Labour (typically the division that deals with Health & Safety matters) would be a commenting authority that would need to be registered as an I&AP. The municipal fire department or disaster management department must also be registered as an I&AP.

- The MHI risk assessment must be conducted by a Department of Labour Approved Inspection Authority (AIA). Since the occupational health and safety legislation requires that an AIA be used for various investigations, the Department's approval will specify the category of work for which a particular organisation or person has been approved. This means that care must be taken by the Applicant to ensure that a correctly approved party is appointed to undertake the MHI risk assessment.

- If, on the basis of the risk assessment, a facility is classed as a MHI, this fact must be communicated to any person that could be affected by the facility.[76] Typically this involves advertising the MHI, once the risk assessment has been completed. It is possible to dovetail this advert with that being undertaken for the EIA process, depending on the circumstances. For example, it has been decided to place an advert in the press announcing the availability of the Draft EIAR, it should also be possible to advertise the availability of the MHI risk assessment since this study would be included in the Draft EIAR as a specialist study.

- The comment period in respect of the MHI Risk Assessment is not specified in the MHI Regulations. A comment period of 60 days is typically applied in respect of the MHI Risk Assessment. This is the result of 60 days being the period given for health and safety structures within the organisation (e.g. health and safety committee) to comment on the arrangements made for the undertaking of the risk assessment.

4.2.2 Dealing with the question of exemptions

There is no provision in NEMA for exemption from the EIA Regulations in their entirety. Section 24M of NEMA provides for exemption from any provision in the Act except section 24(4)(a). Section 24(4) deals with the requirements for investigating, assessing and communicating potential impacts or consequences of activities on the environment. Some of these requirements are set out in section 24(4)(a) and other in section 24(4)(b). Thus, application can be made for exemption from any provision in section 24(4)(b), which includes the requirement to consider alternatives. Such exemption can be granted by the Minister, MEC or the Minister of Minerals and Energy.[77] In NEMA

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[76] MHI Regulations – Regulation 5(8).

[77] Section 24M(2) – Note the Minister of Minerals and Energy's power to grant exemptions is limited to the provisions in section 24(4)(b) of NEMA.

the Minister of Minerals and Energy is defined as that Minister who is responsible for the implementation of environmental matters in relation to mining). The general objectives of Integrated Environmental Management in NEMA include the consideration of alternatives.[78] Thus, the competent authority is likely, in most instances, to be reluctant to grant an exemption in this regard. An exemption cannot be granted from providing a BAR or an EIAR, as NEMA specifies that potential impacts on the environment of listed or specified activities must be considered, investigated, assessed and reported on to the competent authority or the Minister of Minerals and Energy, as the case may be.[79]

The EIA regulations do allow for exemptions (Regulation 51), but this is only applicable to provisions within the regulations themselves. An exemption could, therefore, be obtained from having to complete specific steps in the Basic Assessment or the Scoping and EIA process. Probably the most common area where an exemption could be considered is with regard to public participation requirements. For example, it would make sense to apply for exemption from putting up a site notice as required in terms of Regulation 56(2)(a) where the location is remote, neighbours are situated far away from the site and/or the volume of passing traffic is extremely low (i.e. the chances of an I&AP seeing the notice is extremely low).

DEBUNKING THE MYTHS

THE MYTH: Applying for exemption will result in a shorter, faster process.

THE REALITY: The Applicant (via the EAP) is required to provide a motivation for exemption. This will generally involve the collection and analysis of information. Sufficient information needs to be provided to the decision-maker as the competent authority is required to apply his/her mind to an exemption application as rigorously as would be the case for any other type of decision. Exemptions also require public participation. Exemption decisions are appealable and if granted prior to the decision to refuse or grant environmental authorisation will result in the application for environmental authorisation being delayed. No timeframes are provided for deciding on exemption applications. Given all of these factors an exemption from certain provisions of the EIA regulations may not always result in a shorter or faster process.

Although it may seem reasonable, in the example given, to apply for exemption from Regulation 56(2)(a), consideration must be given to alternative and more appropriate methods of reaching I&APs (e.g. notices on Community Notice Boards). In motivating for exemption from any public participation requirement, the EAP must show that other options have been considered or provide adequate proof that it is appropriate in the circumstances to undertake fewer activities than the EIA regulations specify. In doing so, certainty that the rights of I&APs will not be negatively affected must be provided, since the EIA regulations specify that an exemption may not be granted if the rights of any I&APs are likely to adversely affected.[80]

The EIA Regulations give the competent authority a wide discretion to grant or refuse applications for exemptions. An exemption may only be granted if:

- the exemption is unlikely to have a significant detrimental impact on the environment;
- the provision cannot be implemented in practice in the case in question; or
- the exemption is unlikely to adversely affect the rights of I&APs.

In addition, the decision to grant an exemption falls within the PAJA definition of an administrative action. PAJA provides numerous grounds on which administrative action may be reviewed by a

[78] Section 23.
[79] Section 24(1).
[80] Regulation 51(2).

court,[81] and thus competent authorities deciding applications for exemptions must take these into account: These grounds include that:

- the competent authority was biased or reasonably suspected to be biased;
- he or she took into account irrelevant considerations or failed to consider relevant ones or was influenced by an error of law;
- the decision was not rationally connected to the purpose for which it was taken (e.g. to the exemption provision in the EIA regulations, the information before the competent authority or to the reasons given for it by the competent authority);[82] and
- the decision was unreasonable, arbitrary or capricious, procedurally unfair, or taken for an ulterior purpose.

Applying for an exemption should be approached with caution, particularly for projects that fall within the scope of Listing Notice 2 (GN R 387). As a "rule of thumb" exemption from provisions in the EIA regulations in respect of development proposals that require Scoping and EIA is highly unlikely to be approved by the competent authority. The reason for this is that such projects can generally be expected to be significant in scale, with a wide range of environmental concerns.

4.3 Fulfilling responsibilities that apply to organs of state

In this section the potential role of organs of state in applications for authorisations is described and examples provided to assist in explaining these roles. It is necessary to distinguish between the three different roles organs of state may play during an EIA process for authorisations: that of competent authority, Applicant or commenting authority. The role of other organs of state that must issue authorisations under other legislation before the project can proceed is discussed in Section 4.2.1. Where applicable, these organs of state must be registered as commenting authorities by the EAP for the purposes of the EIA process.

This section should be read in conjunction with the legal matrix (Annex B) that has been compiled that lists the legal requirements of NEMA and the regulations and describes the specific considerations for the non-linear development category (i.e. large scale property development, social infrastructure, energy and agri-industry) as well as for the linear development category.

[81] Section 6 of PAJA.
[82] Section 6(2)(f)(ii)(aa) of PAJA.

TABLE 5: Role and responsibilities of organs of state in the EIA process

APPLICABLE CIRCUMSTANCES	RESPONSIBILITIES	EXAMPLE
ROLE: Organ of state as competent authority (decision-maker)		
Listing Notices identify the competent authority for each activity. In most cases the provincial department is the competent authority except in the following circumstances where the National Minister must be the competent authority: • The activity has implications for national environmental policy or international commitments or relations; • The activity will take place in an area identified in terms of sections 24(c)(2)(b) of NEMA in certain circumstances; • The applicant is a national department; • The applicant is a provincial department responsible for environmental affairs; • The applicant is a statutory body (excluding a municipality) performing an exclusive competence of national government; or • Where the activity will take place in a national proclaimed protected area or another conservation area under the control of a national authority.[83]	• Ensure NEMA section 24(4) minimum requirements have been satisfied • Take into account and apply NEMA section 2 principles • Consider all the criteria prescribed in NEMA section 24(O) • Consult with other State Departments • Comply with prescribed timeframes failing which notify the MEC • Take into account relevant national and provincial guidelines • Determine if there is adequate information to make a decision • Take comments from other organs of state into account • Assess the submission in terms of relevant legislation, policies, plans, strategies, and guidelines with a view to upholding the principles of sustainability • Offer advice to the Applicant and the EAP throughout the process • Ensure consistency in communication with the EAP and/or the Applicant • Take decisions that are reasonable and fair and that advance sustainability • Provide reasons or rationale for the decision, including how the NEMA principles have been applied	• DEA will be the competent authority for all ESKOM energy generation and transmission projects, independent electricity producers and co-generation projects and the provincial department is the commenting authority. • DEA will be the competent authority for a large-scale property development that is located on the shores of a RAMSAR wetland[84], which is also a National Park. It is important that DEA take cognisance of the provincial environmental department's input and in particular the opinion of the provincial conservation agency. • Apply principles of cooperative governance under chapter 3 of the Constitution where permissions from different organs of state are required. • Where information or processes necessary for EIA are substantially similar to those required by legislation other than the EIA Regulations, in terms of Regulation 6, a written agreement must be entered into with the other organ(s) of state concerned, so that the processes are co-ordinated.

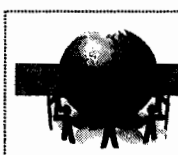
[83] Section 24C of NEMA.

[84] A RAMSAR wetland is a site designated by the Conference of the Contracting Parties to the Convention on Wetlands of International Importance, especially as Waterfowl Habitat (the Ramsar Convention) for inclusion on the List of Wetlands of International Importance because it meets one or more of the Ramsar criteria.

APPLICABLE CIRCUMSTANCES	RESPONSIBILITIES	EXAMPLE
ROLE: Organ of state as Applicant		
Organ of state wishes to undertake a Listed Activity.	• Comply with Regulations (as any other applicant) • Comply with NEMA section 2 principles	• Provincial agriculture department emerging farmer project CASP (Comprehensive Agricultural Support Programme) • Provincial low cost housing project on property over 20ha • The precautionary principle must be taken into account: The Department of Housing for example has undertaken a site identification initiative (of sites for which environmental authorisation was not granted) and this must be factored into strategic planning for future projects
ROLE: Organ of state as Commenting Authority		
Authorities will be called upon to comment on an application which includes aspects that fall within their mandate	• Comment on application within prescribed timeframes • Apply NEMA section 2 principles • Identify technical requirements to be addressed in assessment • Provide relevant baseline information on site and local environment • Participate in the process in a constructive and responsible manner • Provide clear and relevant input within the legislated timeframes • Provide relevant policies, plans, guidelines and any applicable norms and standards • Liaise with other government departments (co-operative governance) and with the competent authority regarding concerns • If an approving or permitting authority in respect of some aspect of the application, liaise with the competent authority around the decision-making process (e.g. share views)	• DWA should be consulted for large-scale development on land where there are water resources. • Provincial conservation agencies must be consulted regarding potential for biodiversity loss and impacts on biodiversity.

4.4 Making use of guidelines in the EIA process

In terms of Regulation 73, the Minister may by notice in the Government Gazette issue national Guidelines on the implementation of the EIA regulations. The MEC may also by notice in the official Gazette of the province issue provincial guidelines in relation to applications in respect of which the MEC is the competent authority. The status of such guidelines is that they are "not binding but must be taken into account when preparing, submitting, processing or considering any application."[85] Therefore, applicants, EAPs and competent authorities must all be aware of relevant guidelines published under regulations 73 or 74. Guidelines that may be relevant to applications for environmental authorisations are listed in Table 5.



IN A NUTSHELL

- Guidelines are not legally binding but if they are relevant to the decision being made they ***must*** be considered by EAPs and the Applicant.
- Decision-makers should take account of guidelines when applying their minds to a decision.

Provincial guidelines must be consistent with national guidelines that are issued in terms of regulation 73. Prior to issuing guidelines, the Minister or MEC must publish draft guidelines in the relevant Gazette for public comment.[86] Consideration should also be given to draft guidelines if they are relevant, but the EIA regulations do not require that these be taken into account.

[85] Regulation 75.
[86] Regulation 76.

TABLE 6: List of useful policies and guidelines

NAME OF DOCUMENT	BRIEF DESCRIPTION	WHEN TO USE	WHERE TO FIND
EIA Guidelines: NEMA EIA Regulations (Department of Environmental Affairs – formerly the Department of Environmental Affairs & Tourism)			
General Guide to the EIA Regulations (Guideline 3)	• Provides an overview of the requirements of the Regulations.	• Confirming or clarifying the requirements of the EIA Regulations.	Contact DEA: (012) 310 - 3911
Public participation (Guideline 4)	• Describes the requirements for the PPP.	• Planning the PPP for Scoping and EIA. • Reviewing the PPP by the facilitator and/or EAP on an ongoing basis to identify the need for adjustments.	Contact DEA: (012) 310 - 3911
Assessment of alternatives and impacts (Guideline 5)	• Includes the legal requirements for identifying and assessing alternatives, an overview of the range of alternatives that may be considered and a summary of the role of considering alternatives.	• Identifying alternatives and determining the approach to their evaluation. • Identifying impacts and determining the approach to their assessment and evaluation.	Contact DEA: (012) 310 - 3911
IEM Information Series (Department of Environmental Affairs – formerly the Department of Environmental Affairs & Tourism)			
Screening (No .1)[87]	• Provides an overview of the screening process and clarifies the purpose and definition of screening	• Determining the need for an application under the EIA Regulations.	http://www.deat.gov.za
Scoping (No. 2)[88]	• Clarifies the purpose of scoping and explains the scoping process	• Conducting the Scoping process.	http://www.deat.gov.za
Stakeholder engagement (No. 3)[89]	• Describes the requirements for PPP. • Provides guidance on the level of public participation required.	• Planning the PPP for Scoping and EIA. • Reviewing the PPP by the facilitator and/or EAP on an ongoing basis to identify the need for adjustments.	http://www.deat.gov.za
Specialist studies (No. 4)[90]	• Describes how to identify the need for specialist studies and how to determine the required scope of work. • Provides guidance applicable to the EAP and the specialist	• Formulating the Plan of Study for EIA in the Scoping Report (Regulation 29(j)). • Developing the ToR to be provided to specialists.	http://www.deat.gov.za
Impact significance (No. 5)[91]	• Describes how to identify impacts and methods for determining the significance of impacts.	• Determining the impact assessment methodology / ies to be applied. • Undertaking the assessment of impact significance.	http://www.deat.gov.za

[87] DEAT (2002): Screening, Integrated Environmental Management, Information Series 1, Department of Environmental Affairs, Pretoria
[88] DEAT (2002): Scoping, Integrated Environmental Management, Information Series 2, Department of Environmental Affairs, Pretoria
[89] DEAT (2002): Stakeholder Engagement, Integrated Environmental Management, Information Series 3, Department of Environmental Affairs, Pretoria
[90] DEAT (2002): Specialist Studies, Integrated Environmental Management, Information Series 4, Department of Environmental Affairs, Pretoria
[91] DEAT (2002): Impact Significance, Integrated Environmental Management, Information Series 5, Department of Environmental Affairs, Pretoria

NAME OF DOCUMENT	BRIEF DESCRIPTION	WHEN TO USE	WHERE TO FIND
IEM Information Series (Department of Environmental Affairs – formerly the Department of Environmental Affairs & Tourism)			
Ecological risk assessment (No.6)[92]	• Defines Ecological Risk Assessment • Provides a framework for Ecological Risk Assessment and its use within an EIA process	• Determining the ToR for specialist biodiversity studies where ecological, conservation or biodiversity issues have been identified in the scoping process. • Developing the methodology for assessing biodiversity impacts.	http://www.deat.gov.za
Cumulative effects assessment (No. 7)[93]	• Explains the principles of cumulative effects assessment • Describes approaches to incorporating the evaluation of cumulative impacts into the EIA process.	• Developing a methodology or approach for cumulative impact assessment, which is to be included in the Plan of Study for EIA. • Reporting on cumulative impacts in the EIR (Regulation 32 (k)).	http://www.deat.gov.za
Cost Benefit Analysis (No. 8)[94]	• Provides an introduction to Cost Benefit Analysis • Explains the types and applications of Cost Benefit Analysis	• Evaluating or assessing project alternatives such as technology options or design options. • Reviewing of the economic specialist report by the EAP to determine its adequacy.	http://www.deat.gov.za
Life Cycle Assessment (No. 9)[95]	• Provides an introduction to Life Cycle Assessment • Explains the types and applications of Life Cycle Assessment	• Determining the methodology to be applied for assessing alternatives – this approach is most often applied/used for industrial projects.	http://www.deat.gov.za

Strategic Environmental Assessment (No 10) – superseded by the Guideline on SEA published in 2007[96]	• Defines Strategic Environmental Assessment (SEA) and its purpose
	• Describes the SEA process and links between SEA and EIA
		• Where an SEA has been completed in the area where development subject of an EIA is being proposed:
		  • Collating baseline information
		  • Scoping of issues and alternatives
		  • Determining the scope of work for the impact assessment
			http://www.deat.gov.za

Criteria for Determining Alternatives in EIA (No. 11)[97]	• Identifies and describes the different types of alternatives • Describes how to identify alternatives and how to deal with the "no go" alternative.	• Determining or identifying alternatives to be investigated in the EIA.	http://www.deat.gov.za

[92] DEAT (2002): Ecological Risk Assessment, Integrated Environmental Management, Information Series 6, Department of Environmental Affairs, Pretoria
[93] DEAT (2004): Cumulative Effects Assessment, Integrated Environmental Management, Information Series 7, Department of Environmental Affairs, Pretoria
[94] DEAT (2004): Cost Benefit Analysis, Integrated Environmental Management, Information Series 8, Department of Environmental Affairs, Pretoria
[95] DEAT (2004): Life Cycle Assessment, Integrated Environmental Management, Information Series 9, Department of Environmental Affairs & Tourism, Pretoria
[96] DEAT (2007): Strategic Environmental Assessment Guideline, Integrated Environmental Guideline Series 4, Department of Environmental Affairs & Tourism, Pretoria
[97] DEAT (2004): Criteria for Determining Alternatives in EIA, Integrated Environmental Management, Information Series 11, Department of Environmental Affairs & Tourism, Pretoria

NAME OF DOCUMENT	BRIEF DESCRIPTION	WHEN TO USE	WHERE TO FIND
IEM Information Series (Department of Environmental Affairs – formerly the Department of Environmental Affairs & Tourism)			
Environmental Management Plans (No. 12)[98]	• Provides generic information on the purpose, objectives and content of EMPs.	• Compilation of the draft EMP in the EIA report (which may require input from specialists) in terms of Regulation 34.	http://www.deat.gov.za
Review in EIA (No. 13)[99]	• Defines the purpose of review and describes what is involved in the review process.	• Reviewing (i.e. internal review or checking) of the EIR before submission to ensure it meets requirements. • Reviewing of the EIR by the peer reviewer (if one has been appointed).	http://www.deat.gov.za
Environmental Impact Reporting (No. 15)[100]	• Provides guidance on the content and quality of the EIR	• Planning of the structure and content of the EIR. • Reviewing (i.e. internal review or checking) of the EIR before submission to ensure it meets requirements. • Reviewing of the EIR by the peer reviewer (if one has been appointed).	http://www.deat.gov.za
Draft Guidelines: NEMA EIA Regulations - Guidelines and Information Document Series (Department of Environmental Affairs and Development Planning – W Cape)			
Guideline on the Interpretation of the Listed Activities	• Addresses the interpretation of listed activities – it includes definitions and explains what is included and excluded within the definition of each listed activity.	• Determining whether an application is required or not. • Determining which activities need to be included in the application (e.g. if multi-faceted development).	http://www.capegateway.gov.za
Guideline on Alternatives	• Includes the legal requirements for identifying and assessing alternatives, an overview of the range of alternatives that may be considered and a summary of the role of considering alternatives.	• Identifying alternatives in the scoping stage of the Basic Assessment or of the Scoping and Impact Assessment processes.	http://www.capegateway.gov.za
Guideline on Exemption Applications	• Addresses minimum legal requirements for exemptions and public participation processes related to exemptions. • Integrates the public participation processes required for exemption applications with the public participation requirements of a Basic Assessment process or a scoping and EIA. • Considers circumstances under which applications for exemption will and will not be considered.	• Undertaking an exemption application • Determining if an exemption is warranted or appropriate.	http://www.capegateway.gov.za

[98] DEAT (2004): Environmental Management Plans, Integrated Environmental Management, Information Series 12, Department of Environmental Affairs & Tourism, Pretoria
[99] DEAT (2004): Review in EIA, Integrated Environmental Management, Information Series 12, Department of Environmental Affairs & Tourism, Pretoria. Note that number 13 in this series deals with Environmental Auditing and is thus not directly relevant to the EIA process.
[100] DEAT (2004): Environmental Impact Reporting, Integrated Environmental Management, Information Series 15, Department of Environmental Affairs & Tourism, Pretoria

NAME OF DOCUMENT	BRIEF DESCRIPTION	WHEN TO USE	WHERE TO FIND
Draft Guidelines: NEMA EIA Regulations - Guidelines and Information Document Series (Department of Environmental Affairs and Development Planning – W Cape)			
Guideline on Appeals	• Focuses on appeal applications, the processing of appeals, the appeal panel and the validity of appeals. • Provides guidance on minimum legal requirements for appeal applications and public participation related to appeals.	• Compiling information for the submission of an appeal. • Determining if there are adequate grounds to lodge an appeal.	http://www.capegateway.gov.za
Guideline on Public Participation	• Describes the requirements for the procedure for the PPP. • Sets out when such process should be conducted and provides guidance on the level of public participation required.	• Planning of the PPP for Scoping and EIA by the facilitator and/or EAP. • Reviewing the PPP by the facilitator and/or EAP on an ongoing basis to identify the need for adjustments.	http://www.capegateway.gov.za
Guideline on Transitional Arrangements	• Provides guidance to parties involved in applications submitted under the ECA that were still pending when the NEMA EIA Regulations were implemented. • Also provides clarity to parties involved in decisions taken in terms of the ECA regulations that were still in force when the NEMA EIA regulations came into effect.	• Dealing with applications received or decisions taken under the ECA. This guideline must be read in conjunction with NEMA and the EIA regulations under NEMA.	http://www.capegateway.gov.za
Guideline on Need and Desirability	• Explains the concept of need and desirability in terms of the general meaning, in which need refers to time and desirability to place • Provides a basis for addressing need and desirability as individual concepts through using the questions set out in this guideline	• Describing need and desirability of the proposed activity and alternatives (BAR, Scoping Report, EIAR) • Evaluating and making decisions on applications (by the competent authority)	http://www.capegateway.gov.za
Guidelines for Specialist Involvement in EIA Processes (Department of Environmental Affairs and Development Planning – W Cape)			
Guidelines for determining the Scope of Specialist involvement in EIA Processes[101]	• Sets out an approach to determining the need for, timing, role and scope of specialist involvement during the different stages. • A best practice approach is adopted that encourages early and appropriate specialist involvement in the EIA process.	• Formulating the Plan of Study for EIA in the Scoping Report. • Developing the ToR to be provided to specialists. • Determining the need for specialist comments or statements for the BAR.	http://www.capegateway.gov.za
Guidelines for determining the Scope of Specialist involvement in EIA Processes102	• Sets out an approach to determining the need for, timing, role and scope of specialist involvement during the different stages. • A best practice approach is adopted that encourages early and	• Formulating the Plan of Study for EIA in the Scoping Report. • Developing the ToR to be provided to specialists.	http://www.capegateway.gov.za

[101] Münster, F. 2005. *Guideline for determining the scope of specialist involvement in EIA processes: Edition 1.* CSIR Report No ENV-S-C 2005 053 A. Republic of South Africa, Provincial Government of the Western Cape, Department of Environmental Affairs & Development Planning, Cape Town.

[102] Münster, F. 2005. *Guideline for determining the scope of specialist involvement in EIA processes: Edition 1.* CSIR Report No ENV-S-C 2005 053 A. Republic of South Africa, Provincial Government of the Western Cape, Department of Environmental Affairs & Development Planning, Cape Town.

NAME OF DOCUMENT	BRIEF DESCRIPTION	WHEN TO USE	WHERE TO FIND
	appropriate specialist involvement in the EIA process.	• Determining the need for specialist comments or statements for the BAR.	

NAME OF DOCUMENT	BRIEF DESCRIPTION	WHEN TO USE	WHERE TO FIND
Guidelines for Specialist Involvement in EIA Processes (Department of Environmental Affairs and Development Planning – W Cape)			
Guidelines for determining the Scope of Specialist involvement in EIA Processes[103]	• Sets out an approach to determining the need for, timing, role and scope of specialist involvement during the different stages. • A best practice approach is adopted that encourages early and appropriate specialist involvement in the EIA process.	• Formulating the Plan of Study for EIA in the Scoping Report. • Developing the ToR to be provided to specialists. • Determining the need for specialist comments or statements for the BAR.	http://www.capegateway.gov.za
Guideline for involving Biodiversity Specialists in EIA Processes[104]	• Identifies the main triggers and key issues that require specialist input on biodiversity. • Covers the range of possible inputs of biodiversity specialists. • Focuses on the role of the EIA practitioner in planning the specialist input and on the issues to be considered in the finalisation of the Terms of Reference (ToR).	• Developing ToR for the biodiversity specialist, where scoping has shown that biodiversity, nature conservation and /or ecological issues require investigation. • Reviewing of the reports provided by biodiversity specialist by the EAP.	http://www.capegateway.gov.za
Guideline for involving Hydrogeologists in EIA Processes[105]	• Lists considerations to be taken into account when drawing up ToR for hydro-geological specialists and when reviewing specialist hydro-geological input.	• Developing ToR for the hydro-geological specialist study, where scoping has determined that groundwater issues require investigation. • Reviewing of the hydro-geological specialist report by the EAP to determine if it is adequate.	http://www.capegateway.gov.za
Guideline for involving Heritage Specialists in EIA Processes[106]	• Focuses on when heritage specialist input is required, which aspects need to be addressed by the specialist and the criteria to be used to evaluate the adequacy of the input. • Emphasises that heritage specialist input needs to occur at the earliest possible stage in the project cycle.	• Developing ToR for the heritage specialist study, where scoping has determined that heritage issues require investigation. • Reviewing of the heritage specialist report by the EAP to determine if it is adequate.	http://www.capegateway.gov.za

[103] Münster, F. 2005. *Guideline for determining the scope of specialist involvement in EIA processes: Edition 1.* CSIR Report No ENV-S-C 2005 053 A. Republic of South Africa, Provincial Government of the Western Cape, Department of Environmental Affairs & Development Planning, Cape Town.

[104] Brownlie, S. 2005. *Guideline for involving biodiversity specialists in EIA processes: Edition 1.* CSIR Report No ENV-S-C 2005 053 C. Republic of South Africa, Provincial Government of the Western Cape, Department of Environmental Affairs & Development Planning, Cape Town.

[105] Saayman, I. 2005. *Guideline for involving hydrogeologists in EIA processes: Edition 1.* CSIR Report No ENV-S-C 2005 053 D. Republic of South Africa, Provincial Government of the Western Cape, Department of Environmental Affairs & Development Planning, Cape Town.

[106] Winter, S. & Baumann, N. 2005. *Guideline for involving heritage specialists in EIA processes: Edition 1.* CSIR Report No ENV-S-C 2005 053 E. Republic of South Africa, Provincial Government of the Western Cape, Department of Environmental Affairs & Development Planning, Cape Town.

NAME OF DOCUMENT	BRIEF DESCRIPTION	WHEN TO USE	WHERE TO FIND
		• Determining the need for specialist comments or statements for the BAR.	

NAME OF DOCUMENT	BRIEF DESCRIPTION	WHEN TO USE	WHERE TO FIND
Guidelines for Specialist Involvement in EIA Processes (Department of Environmental Affairs and Development Planning – W Cape)			
Guideline for involving Visual and Aesthetic Specialists in EIA Processes[107]	• Defines the visual and aesthetic components of the environment and deals with typical factors that trigger the need for specialist visual input to a particular project. • Deals with the choice of an appropriate visual specialist and the preparation of the ToR.	• Developing ToR for the visual specialist where scoping has shown that visual issues require investigation. • Reviewing of the reports provided by the visual specialist by the EAP. • Determining the need for specialist comments or statements for the BAR.	http://www.capegateway.gov.za
Guideline for involving Economists in EIA Processes[108]	• Addresses the issues of when economic inputs are required, which aspects must be addressed by the economic specialist and the specific criteria against which economic input can be measured.	• Developing ToR for the economic specialist, where scoping has shown that economic issues require investigation. • Reviewing of the reports provided the economic specialist by the EAP. • Determining the need for specialist comments or statements for the BAR.	http://www.capegateway.gov.za
Guideline for the Review of Specialist Input in EIA Processes[109]	• Identifies triggers that determine when review should take place, and who should undertake the review. • Presents criteria that support the review process in determining whether or not the input meets the minimum requirements and is reasonable, objective and professionally discernible. • Identifies triggers for the review of specialist input by different reviewers. • Provides review criteria for the overall quality assurance of the specialist input.	• Reviewing the adequacy of specialist reports by the EAP.	http://www.capegateway.gov.za

[107] Oberholzer, B. 2005. *Guideline for involving visual & aesthetic specialists in EIA processes: Edition 1.* CSIR Report No ENV-S-C 2005 053 F. Republic of South Africa, Provincial Government of the Western Cape, Department of Environmental Affairs & Development Planning, Cape Town.

[108] Van Zyl, H.W., de Wit, M.P. & Leiman, A. 2005. *Guideline for involving economists in EIA processes: Edition 1.* CSIR Report No ENV-S-C 2005 053 G. Republic of South Africa, Provincial Government of the Western Cape, Department of Environmental Affairs & Development Planning, Cape Town.

[109] Keatimilwe, K. and Ashton, P.J. 2005. *Guideline for the review of specialist input in EIA processes: Edition 1.* CSIR Report No ENV-S-C 2005 053 B. Republic of South Africa, Provincial Government of the Western Cape, Department of Environmental Affairs & Development Planning, Cape Town.

NAME OF DOCUMENT	BRIEF DESCRIPTION	WHEN TO USE	WHERE TO FIND
DWAF Water Use Authorisation: External Guidelines			
External Guideline: Generic Water Use Authorisation Application Process	• Provides an overview of the water uses, contact details of relevant officials, details of the information required during the licence application process and the process leading to the issuing of an authorisation.	• Identifying whether an activity involves a water use licence. • Applying for a water use licence. • Planning the steps in the environmental authorisation process and co-ordinating this with the timing of other licensing applications.	http://www.dwaf.gov.za/Documents
External Guideline: Section 21(c) and (i) Water Use Authorisation Application Process (Impeding or Diverting the Flow of Water in a Water Course, and/or Altering the Bed, Banks, Course or Characteristics of a Water Course)	• Provides information on activities that may be covered under section 21(c) and (i) water uses and authorisations that may be applicable. • Describes the authorisation process, the role of the applicant and the information and procedural requirements during decision-making.	• Identifying whether an activity involves a Section 21 (c) or (i) water use. • Determining what steps to take when applying for a licence. • Incorporating the information the authorities will need in the application. • Ensuring that the correct application procedure is followed.	http://www.dwaf.gov.za/Documents
External Guideline: Section 21(d) Water Use Authorisation Application Process (Stream Flow Reduction Activities)	• Describes the water use authorisation procedure that applies to the regulation of stream flow reduction activities. • Sets out the legislative framework and the steps that must be followed, the information that is required, the obligations of the various role-players and the technical assistance that is available to the applicant.	• Identifying whether an activity involves a Section 21 (d) water use. • Determining what procedural steps need to be taken in a licence application. • Checking that each role player has carried out its own obligations and responsibilities. • Ensuring that the licence application accurately reflects the technical specifications it requires.	http://www.dwaf.gov.za/Documents
DWAF Water Use Authorisation: Internal Guidelines			
Internal Guideline: Generic Water Use Authorisation Application Process	• Provides information to department officials on available guidelines and other tools to be used during the process of assessing a water use authorisation application.	• Evaluating applications. • Making decisions on applications.	DWAF (Telephone no: 0800 200 200)
Internal Guideline: Section 21(a) and (b) Water Use Authorisation Application Process (Taking and/or Storing Water)	• Focuses on applications for the taking of surface water and groundwater, and storing of water as well as the taking of water which has been removed from underground but not discharged to a water resource, or disposed of.	• Checking whether a water use activity requires a licence. • Evaluating applications. • Making decisions on applications.	DWAF (Telephone no: 0800 200 200)

NAME OF DOCUMENT	BRIEF DESCRIPTION	WHEN TO USE	WHERE TO FIND
DWAF Water Use Authorisation: Internal Guidelines			
Internal Guideline: Section 21(c) and (i) Water Use Authorisation Application Process (Impeding or Diverting the Flow of Water in a Water Course, and/or Altering the Bed, Banks, Course or Characteristics of a Water Course)	• Assists DWAF's Primary Responsible Officers (PROs) to compile and evaluate the different information requirements for each type of authorisation and to accurately assess section 21(c) and (i) water use licence applications. • Is a useful tool to PROs in the determination of the potential risk to the environment of the proposed activity.	• Checking whether a water use activity requires a licence • Evaluating applications • Making decisions on applications	DWAF (Telephone no: 0800 200 200)
Internal Guideline: Section 21(e), (f), (g), (h), (j) Water Use Authorisation Application Process (Waste Discharge Related)	• Outlines the procedures to be followed in applying for an authorisation, the analyses required at the different stages of the authorisation process and the evaluation methodology to be undertaken for an issuance of a water use authorisation.	• Checking whether a water use activity requires a licence • Evaluating applications • Determining the preferred methodology • Making decisions on applications	DWAF (Telephone no: 0800 200 200)
Other Guidelines			
Guideline on the Application of the EIA Regulations to Structures associated with Communication Networks (Western Cape Department of Environment and Cultural Affairs and Sport: Environmental Management Directorate, EIA Guidelines Series, September 2001)	• Guides the directorate in its decision making role with regards to applications relating to structures associated with communication networks. • Sets out the application process and explains the tasks that the developer needs to fulfil. • Lists the decision-making criteria describing issues that will be considered by the directorate. • Identifies an authorisation criterion which details the minimum requirements that the directorate will apply in the conditions of approval.	• Compiling information for an application that involves communication structures. • Scoping of issues and assessing impacts that require investigation for projects involving communication structures. • Making decisions on applications	http://www.capegateway.gov.za
Provincial Urban Edge Guideline (Western Cape Department of Environmental Affairs and Development Planning, December 2005)	• Establishes a consistent approach in dealing with urban growth, infill and consolidation along the urban edge in the Western Cape. • Addresses development applications that cause amendments of the urban edge or that involve development outside the edge, affect an edge management area or abutt the urban edge.	• Determining environmental objectives that should be applied in the impact assessment (significance criteria).	http://www.capegateway.gov.za

NAME OF DOCUMENT	BRIEF DESCRIPTION	WHEN TO USE	WHERE TO FIND
Other Guidelines			
Guidelines for Resort Developments in the Western Cape (Department of Environmental Affairs and Development Planning, December 2005)	• Focuses on considerations that should be taken into account in assuring the sustainability of the relevant area through the development of appropriate resort facilities. • Gives attention to the criteria relevant to evaluate resort applications.	• Municipalities in considering resort applications. • Applicants in compiling and submitting applications.	http://www.capegateway.gov.za
Guidelines for Development on Mountains, Hills and Ridges of the Western Cape (Western Cape Department of Environment and Cultural Affaires and Sport, April 2002)	• Sets out the framework for decision-making in respect of development in mountainous areas, hills and ridges. • Details the way in which the Environmental Management Directorate evaluates development proposals on mountains, hills or ridges.	• Officials in making decisions about development on mountains, hills or ridges. • Applicants in compiling development proposals.	http://www.capegateway.gov.za
Guidelines for Golf Courses, Golf Estates, Polo Fields and Polo Estates in the Western Cape (Department of Environmental Affairs and Development Planning, December 2005)	• Provides clarity into the application and assessment process by clarifying the requirements for golf courses, golf estates, polo fields and polo estates as well as the design considerations. • Informs decision-making with respect to golf courses, golf estates, polo fields and polo estates in all spheres of government.	• Decision-makers when dealing with applications for golf courses, golf estates, polo fields and polo estates and other developments of similar scale or complexity. • Applicants in formulating development proposals. • Consultants in undertaking the studies required for an EIA application.	http://www.capegateway.gov.za
Gauteng Mast Construction Guidelines (Gauteng Provincial Government: Department of Agriculture, Conservation and Environment)	• Lists the factors to be considered in avoiding sensitive visual elements in the construction of masts. • Encourages the sharing of masts and identifies appropriate instances for sharing.	• Compiling information for an application that involves the construction of masts. • Scoping of issues and assessing impacts that require investigation for projects involving mast construction.	http://www.gdace.gpg.gov.za
Ridges Guidelines, Gauteng Provincial Government Department of Agriculture, Conservation and Environment, September 2001 – as reviewed and updated in January 2004 and April 2006	• Provides guidance for development on ridges and the use of ridges.	• Developing ToR for specialists studies. • Developing the scope of work for the Impact Assessment. • Determining the need for specialist comments or statements for the BAR.	http://www.gdace.gpg.gov.za

NAME OF DOCUMENT	BRIEF DESCRIPTION	WHEN TO USE	WHERE TO FIND
Other Guidelines			
Red List Plant Species Guidelines (Gauteng Provincial Government Department of Agriculture, Conservation and Environment, June 2006)	• Applicable to any development, construction or actions that may result in the ecological degradation or destruction of an area supporting a population of a red list plant species. • Lists the basic rules of conservation applicable to such populations and sets out a buffer zone width for urban and rural areas.	• Developing ToR for specialists studies • Developing the scope of work for the Impact Assessment. • Determining the need for specialist comments or statements for the BAR.	http://www.gdace.gpg.gov.za
DWAF: Practical Field Procedure for Identification and Delineation of Wetlands and Riparian Areas (First Edition, September 2005)	• Describes field indicators and methods to determine whether an area is a wetland or riparian area. • Summarises delineation procedure for wetlands and riparian areas.	• Determining the boundaries of wetlands and riparian areas.	http://www.dwaf.gov.za/Documents
Capenature's Requirements and Recommendations with the Respect to Applications for Environmental, Mining, Agriculture, Water and Planning-Related Authorisations.[110]	• Outlines CapeNature's minimum requirements with respect to the consideration, investigation and reporting on the biodiversity aspects of proposed changes by any development application that requires comment from CapeNature. • Requires a precautionary and risk-averse approach be adopted towards projects which may result in substantial detrimental impacts on biodiversity and requires applicants to demonstrate how proposed activities will comply with particular NEMA principles. • Sets out the format of reports to be submitted and the guidelines and biodiversity plans that must inform the assessment.	• When any development application requires comment from CapeNature.	CapeNature Scientific Services: landuse@capenature.co.za

[110] Ralston S and Williams Q, CapeNature's Requirements and Recommendations with the Respect to Applications for Environmental, Mining, Agriculture, Water and Planning-Related Authorisations.

4.4.1 Reliance on Draft Policies

The question arises as to what extent applicants, EAPs and competent authorities need to consider guidelines which have not been published in the manner described in regulations 73 and 74. A decision by a competent authority to grant or refuse an environmental authorisation under the EIA regulations falls within the definition of "administrative action" in PAJA.[111] PAJA provides that administrative action can be reviewed by the courts if a decision-maker "fails to take into account relevant considerations."[112] Therefore, in practical terms, the competent authority must also take into account other guidelines which have not been published in the manner described in regulation 73 and 74 if they are relevant to the decision that the competent authority is making. Applicants, EAPs and I&APs must also be aware of other relevant guidelines in commenting on the application.

A WORKED EXAMPLE

A developer was interested in purchasing a piece of land then zoned for agricultural use and situated on the Western Cape Coast, on which he intended to build a residential development. At the time, a draft Spatial Development Framework ("SDF") had been published by the local authority, which showed the property abutting the urban edge, but inside the edge. The developer was persuaded by this to buy the land and subsequently made application in terms of NEMA for environmental authorisation and in terms of the applicable planning legislation for the land to be re-zoned and subdivided. While these applications were pending, the local authority revised its draft SDF and the property in question was drawn outside the urban edge. The competent authority in respect of the NEMA application refused to decide the matter until the urban edge demarcation was resolved. Similarly the local authority refused to progress the planning applications until it the urban edge had finally been determined. In the meantime, the delay had financial costs for the developer.

Was the developer entitled to rely on a draft policy in making his applications?

To the extent that he did, he bore the risk that the urban edge might be finally determined to exclude his property. Since the SDF was a draft when he made his applications for the various permissions, he would have no recourse against the local authority.

Can the competent authority wait for the SDF to be finalised before making its decision?

The Regulations require that a decision is made on an application within 45 days of acceptance of the EIR. If this timeframe cannot be adhered to then a competent authority must inform the Minister or MEC (unless the competent authority is the Minister or MEC). There are no particular consequences that follow a failure to adhere to the 45-day time limit under NEMA but, in terms of PAJA, the failure to make a decision within a reasonable timeframe constitutes unfair administrative action that is reviewable by the courts. A competent authority cannot therefore delay its decision for an unreasonable period of time. What is unreasonable will depend on the circumstances of each case. If the finalisation of the SDF was imminent, a court might be more likely to find that the delay was reasonable.

An issue that sometimes confronts applicants is what to do in instances where they are relying on information contained in draft policies, for example a Spatial Development Framework (SDF) in submitting their applications. This can be problematic if during the course of finalising the policy it is revised in a way that has an impact on the application. It also presents the difficulty to the authority as to whether it should wait for the policy to be finalised before making its decision. At times, the refusal of the authority to decide the application based on a draft policy may result in delays being faced by the applicant which may have financial costs. The case study (worked example) illustrates such a scenario with particular emphasis on whether the competent authority is entitled to refuse to decide an application until a

[111] See the definition of this concept in section 1 of PAJA.
[112] Section 5

policy impacting on the application has been finalised as well as the question as to whether the developer has any recourse as a result of the delay due to the competent authority not deciding the application until the policy was finalised.

4.5 Determining the scope of the impact assessment

The process whereby the alternatives and issues that require investigation in the EIA are determined is referred to as "scoping." This is a critical step in the EIA process, since if it is not comprehensively done, the EIA will be compromised. In terms of the EIA Regulations, scoping is included in the Basic Assessment procedure whereas it is a distinct step or phase in the case of the Scoping and EIA process. Inadequate scoping is likely to result in the rejection of the Scoping Report or the BAR by the competent authority, which will result in time delays. Essentially the main purpose of scoping is to ensure that thorough identification of issues and alternatives is undertaken. It is also important to determine whether any issues and alternatives should be "scoped out."

IMPORTANT POINTS TO REMEMBER

- It is better to obtain an understanding of the characteristics of the project location before planning and design commences. This will enable the project design to be responsive to the environmental and social setting.
- It is critically important to scope issues relevant to the project thoroughly otherwise the effectiveness of the EIA will be severely compromised. The nett result will be that not all the impacts that should be investigated will be investigated, with negative environmental consequences.
- It is important to explain the rationale for excluding certain issues or alternatives from the scope of the EIA, where the EAP determines that the issue or alternative is not relevant or is not material from an environmental impact perspective. Thus, "scoping out" of issues and alternatives must be fully explained.
- Excluding alternatives solely on the basis of financial feasibility would generally not be accepted in the absence of hard data on the business case. It must be remembered that feasibility is not only dependent on financial factors – a project may be financially feasible, but not environmentally feasible due to lack of the required resources (e.g. insufficient or insecure water supply).

Ideally, the Applicant should initiate preliminary environmental research on the site or sites that are being considered for the development before any detailed design or planning has taken place (e.g. before a concept plan / design or preliminary layout has been formulated), so that any potential significant "red flags" can be identified as early as possible in the process. A preliminary investigation of the site can be conducted before or at the stage that the environmental application is being lodged, depending on the project planning cycle or programme. The rationale for this is that the sooner an understanding of the environmental constraints and opportunities associated with the project location is gained, the better from a project planning and design perspective. Such information is particularly useful in establishing at a preliminary level, whether there are any environmental, cultural or social factors that may render the site inappropriate for the type of development being proposed. Furthermore, this enables the Applicant and design team to take a proactive approach, that is, to plan and design the project in a way that is responsive to the environmental, cultural and social setting, rather than the typical reactive approach, namely assess the impacts when the design and location is already fixed.

In determining the scope of the EIA, certain key questions need to be addressed:

- Given the type of development under consideration, what are the likely effects or concerns based on the resources to be used (inputs) and emissions and wastes (outputs) that will be produced?
- Given the proposed location of the development, what are the potential environmental effects or consequences and concerns likely to be both in respect of the site and its surroundings?

- What are the key linkages and variables that are relevant to considering the environmental effects or consequences that are likely to be associated with the project?
- What alternatives are relevant to the proposed project?
- Of the issues and alternatives identified, which of them require further investigation and why?
- Of the issues and alternatives identified, which do not require further investigation and why?

4.5.1 Scoping the issues

A useful starting point for identifying issues is to consider the following three factors:

1. The materials and resources that will be used by the project;
2. The emissions and wastes that will result from the project; and
3. The characteristics (biophysical and socio-economic) of the project location.

Besides using baseline information on the project and the location or receiving environment to determine what needs to be investigated in the EIA, the following questions should be considered and if the answer to any of the above questions is "yes" then the issue should be considered for further assessment.

PRACTICAL EXAMPLES

These photographs show the importance of considering coastal erosion processes. With the listing of construction activities within 100m of the high water mark of the sea, such development requires environmental authorisation. It will be necessary to consider issues such as climate change and the consequences of sea level rise on coastal erosion processes, even at a project level. Hence, the EAP will need to consult experts in climate change prediction and the effects for the coastal area.

Inadequate chemical storage – The photograph shows the result of not considering the need to provide for appropriate storage of chemicals. For example, there is no secondary containment / bunding at this facility. If there is a spill it would run onto the surrounding soil. Continued spillage over time could lead to significant soil and groundwater contamination. Inadequate scoping means that environmental impacts and controls are not comprehensively addressed. This compromises the ability of the EIA to serve as a tool to avoid or prevent impacts and where these cannot be fully prevented, to minimise them.

Informal waste disposal – This photograph shows the results of inadequate consideration of waste handling and storage requirements for an industrial project. Firstly, there was inadequate scoping of the project needs. Secondly, the question of how waste would be handled during the operational phase was not addressed. Waste was not identified as an issue which means the associated impacts and mitigation measures were not adequately addressed in the EIA process. The result of inadequate scoping is that environmental has not adequately protected from pollution.

In order to assist the process of identifying issues, activities and impacts matrices have been developed for the different project categories or sectors covered in this guideline (See Annexes C – G). There are three matrices for each category or sector, which correspond to the questions listed at the beginning of Section 4.5.1:

- Issues related to location
- Issues related to resource use
- Issues related to emissions and wastes

Each matrix has the issues listed across the top (x-axis) and the applicable Listed Activities down the side (y-axis). Only those Listed Activities that clearly fall within the sector are listed. The Applicant / EAP must take due cognisance of other applicable activities as has been explained in Section 4.2 of this guideline.

A checklist of questions has also been provided (Annex B) to assist in scoping issues. Three separate lists of questions are provided, which are structured along the same lines as the matrices – questions relating to (i) location, (ii) resource use and (iii) emissions and wastes. The lists can be used separately or in combination with the matrices. Questions relating to factors that could serve to reduce or avoid impacts or that are relevant to determining mitigation measures are included in a fourth list (Project Planning and Design Considerations). If consideration is given to these issues early in the project development process, the potential to avoid or minimise environmental impacts in planning and designing the project could be substantially enhanced.

A WORKED EXAMPLE

Question from Annex B:

Is any subsistence farming undertaken on the site or surroundings?

Answer:

Yes (based on site observations and consultation of local communities)

Other questions to consider:

- Is any of the produce sold outside of the local area, thereby generating income?
- Do the producer's of food trade foodstuffs with each other?
- What traditional food production methods are used and could this knowledge be lost?
- Is the community generally healthy? If so, from the community's perspective what is the relationship between health and being able to produce their own food? What is the view of health worker's on this issue?
- What is the overall contribution of producing their own food to the community's ability to feed itself? How dependent is the community on being able to purchase food from elsewhere?

Implication for the scope of the impact assessment:

The impact of the project on subsistence farming must be addressed in the social specialist study. It will also probably be necessary to obtain input from an expert in agricultural potential and subsistence farming. Close liaison between these specialists will be required. Potential impacts could include:

- Loss of access to farming land
- Loss of / decreased self sufficiency for the community from a food production point of view
- Disruption of community structures / networks, norms and traditions, since certain people / community members may be responsible for food production
- Increased dependence on job creation for income (e.g. to purchase food that used to be grown)
- Loss of sense of place
- Opportunities to learn new skills due to employment creation
- Loss of tenure (if land owned)
- Loss of commonage (if community owned)

The tools are aimed at providing "triggers" or pointers to assist in identifying issues that require investigation. When using these tools, it must be borne in mind that they represent a starting point and are aimed at supporting the "issues identification thinking process." Thus use of the checklist of questions (Annex C) and the issues in the matrices (C-G) must not be taken as being the only consideration. Furthermore, it must not be assumed that use of the checklist and matrices will automatically result in the correct and complete scoping of issues. These tools are not a replacement for professional judgement. A worked example is given in the box alongside. This

demonstrates how one question can lead to several other questions, all of which have a bearing on the scope of the impact assessment.

4.5.2 Determining "reasonable" alternatives

The requirement to consider alternatives is set out in NEMA. Section 24 provides that: "procedures for the investigation, assessment and communication of the potential consequences or impacts of activities on the environment must include, with respect to every application for an environmental authorisation and where applicable, investigation of the potential consequences or impacts of the alternatives to the activity on the environment an assessment of the significance of those potential consequences or impacts, including the option of not implementing the activity." The consideration of alternatives is therefore mandatory. In this context, it is important to note that the word "activity" is narrowly defined in the EIA Regulations to mean an identified activity (i.e. an activity that appears in Listing Notice 1 or Listing Notice 2).

DEBUNKING THE MYTHS

MYTH 1: It is the responsibility of I&APs to identify alternatives. The mechanism for identifying alternatives is the Public Participation Process.

THE REALITY: Whilst I&APs may contribute to the formulation of alternatives, it cannot be claimed by the EAP or the Applicant that a particular alternative was not assessed because it was not identified through the Public Participation Process. It is the professional responsibility of the EAP to ensure that all reasonable alternatives are identified and assessed. It is also the responsibility of the EAP to ensure that if an alternative is rejected, this is based on a sound rationale. The EAP must apply his / her expertise and consult the project planning / design team to identify alternatives.

MYTH 1: It is sufficient to exclude alternatives by stating that the preferred alternative is the only one that is financially viable. Any alternative that involves a smaller scale or lower density development is not financially feasible.

THE REALITY: There are various types or categories of alternatives that must be considered. Furthermore, if financial feasibility is used as the sole basis for excluding alternatives, this must be backed up with thorough financial data. Finally, it must be borne in mind that the alternative that is put forward as being the only one that is financially feasible may prove to be unsustainable from an environmental perspective and thus refused by the environmental authority. It is therefore advisable for Applicants to consider smaller and lower density options, particularly in areas that are known to be environmentally sensitive. This may mean adopting a different model of what "financial feasibility" or "business success" constitutes.

The EIA Regulations require that alternatives that are "feasible and reasonable" must be described in the BAR[113] or in the Scoping Report[114], whichever is applicable. Neither "feasible" nor "reasonable" is defined in NEMA or the EIA Regulations. These terms must therefore be given their ordinary meaning. The ordinary meaning of reasonable is "fair and sensible" or "as much as is appropriate or fair."[115] Feasible may be defined as follows: "possible to do easily or conveniently."[116] A guideline produced by the Department of Environmental Affairs and Tourism (now the Department Environmental Affairs) states that: "The number of alternatives that are selected for assessment should not be set arbitrarily, but should be determined by the range of potential alternatives that could be reasonable and feasible and should include alternatives that are **real** alternatives to the proposed activity. The process of selecting alternatives should be clearly documented."[117]

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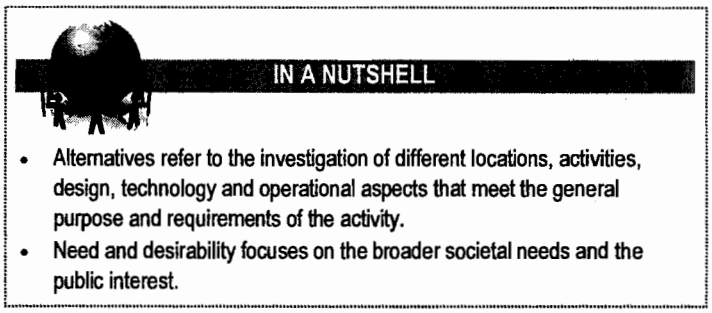
[113] Regulation 23(2)(g).
[114] Regulation 29(1)(b).
[115] *Concise Oxford English Dictionary* 11 ed, 2004, 1198.
[116] *Concise Oxford English Dictionary* 11 ed, 2004, 519.
[117] DEAT (2006) *Guideline 5: Assessment of Alternatives and Impacts in support of the Environmental Impact Assessment Regulations, 2006.* pages 2-3.

It is, therefore, important to document the entire thinking process that has been followed by the Applicant and the design team in developing the project proposal. Often alternatives are considered and are rejected on the basis of technical feasibility or cost or both. This process may take place before any detailed planning and design work is undertaken. Notwithstanding, for the purposes of the EIA process, it is relevant to document the rationale for adopting a particular design or approach to the development. Extreme care must be exercised when excluding alternatives solely on the basis of financial feasibility. Feasibility needs to be more holistically considered and take account of environmental and social constraints as well.



Another factor that needs to be borne in mind in respect of alternatives is that a description of the need and desirability of the proposed activity and the associated alternatives must be provided in the BAR or the EIAR. In essence, need and desirability refer to the question of whether it is the right time and right place for locating the type of land-use that is being proposed.[118]

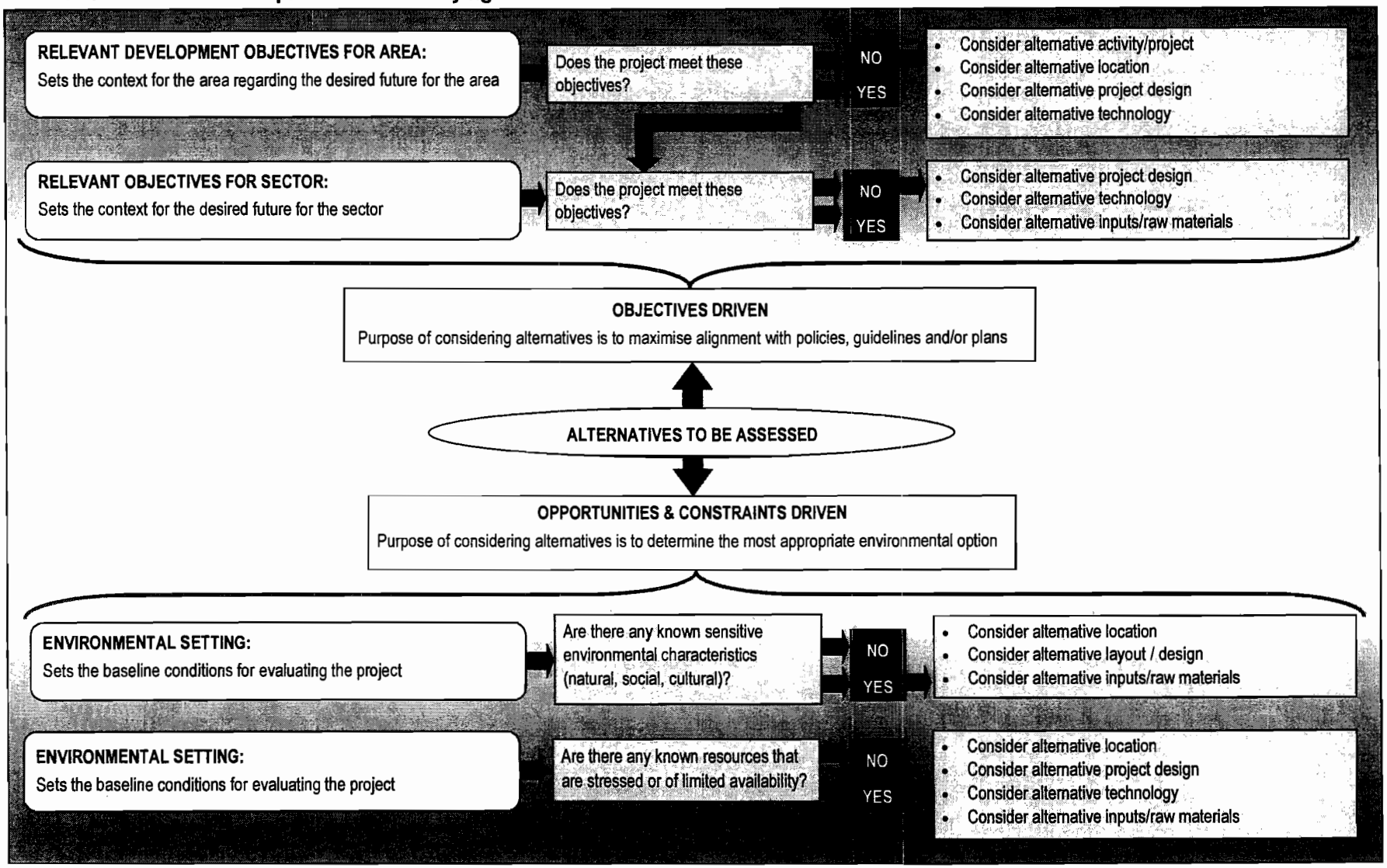
Cognisance needs to be taken of the following when determining "reasonable alternatives":

- What are the development objectives or goals for this area? Any policy, plan, strategy or guideline that is relevant to the utilisation of land and/or the development direction / approach for the area on which the site/property is located (e.g. SDF, conservation plans).
- What are the objectives or goals for this economic, business or development sector? Any policy, plan, strategy or guideline that is relevant to the development or business sector with which the application is concerned (e.g. energy-related projects should make reference to national and provincial policies on climate change).
- What is the current environmental setting? The characteristics of the receiving environment are important in determining how well suited the proposed development is in the context of the surroundings.
- What are the available environmental resources? This factor relates to the resources required by the project from the local area (e.g. water, energy, effluent treatment capacity, waste disposal capacity, availability of local labour etc.).

The identification of "reasonable alternatives" should encompass a bottom-up as well as a top-down approach as is illustrated in Figure 3. Evaluating the opportunities and constraints (as indicated in the following diagram) is relevant to determining whether or not the proposed development and each alternative, is ecologically sustainable.

[118] DEA&DP (May 2009) Guideline on Need and Desirability, NEMA EIA Regulations Guideline and Information Document Series. Western Cape Department of Environmental Affairs and Development Planning.

FIGURE 3: Overview of the process for identifying alternatives



From an EIA best-practice point of view, the purpose of considering alternatives is to identify the most appropriate option from an environmental perspective (i.e. considering biophysical and socio-economic factors). Thus, the consideration of alternatives and the consideration of mitigation measures often go hand-in-hand. For example, in determining ways to avoid environmental impacts, an alternative project design or layout may emerge. This represents a variation of that alternative, namely a version where the impacts may be reduced relative to the original way in which the alternative was conceived. Thus the means for preventing, or at least minimising impacts (i.e. impact mitigation) is to change the project design or layout. For example, on a site where the site layout would result in having to remove Red Data species, this impact could be avoided by altering the layout. This is a mitigation measure, namely altering the development footprint to avoid a negative environmental impact.

A WORKED EXAMPLE

A developer acquires a large site (600ha) on the coastline, which is located about 20 kilometres outside of the nearest town/urban centre. The following is proposed:

- A spa and gym facility
- An eighteen hole golf course
- A 50-room hotel
- A hiking trail along the coast
- 450 single dwellings / lodges
- 450 townhouse style homes

The total development footprint amounts to 460ha and it is proposed that the remainder be managed as a nature conservation area. An alternative is proposed comprising 430 townhouse style homes and 420 single dwellings, which will result in a decrease in the footprint of about 10 ha. The layout is essentially the same as the original proposal. It is stated that this is the only feasible alternative, based on a financial factors. No other alternatives are identified besides the "no go" option, which is mandatory.

Is the identification of alternatives acceptable? No

Why not? Only one layout alternative is being put forward and it is not significantly different from the original proposal in terms of its density and extent or "development footprint." It represents a minor variation of the original proposal.

What would constitute a "reasonable alternative"? Examples would be:

- A significant decrease in density and / or the development footprint (e.g. 30-50% less may be considered a significant change relative to the original proposal).
- A development concept based on small holdings combined with nature conservation-based tourism and/or agri-tourism
- A development concept that excludes the golf course.
- Use of alternative building materials and designs / architectural styles.
- Alternative water and energy sources.
- Alternative ways of dealing with sewage / domestic effluent / stormwater

Great care must be taken in ensuring that cognisance is taken of all reasonable options across all categories or types of alternatives. Stated differently, it is generally not adequate to only consider one type of alternative for a project, such as only different site layout options. For example, alternative technologies or engineering solutions for handling stormwater could be considered. These should be assessed on a comparative basis, the objective being to determine the most environmentally acceptable (i.e. with least environmental impact) option. Table 7 shows the types or categories of alternatives, with examples within each type. The relevance to each of the sectors covered in this guideline is also shown in the table. Another area where alternatives may emerge is in the consideration of mitigation measures. For example, there may be more than one way in which to avoid or minimise a particular impact. These alternative mitigation measures must then be assessed on a comparative basis to determine which will be the most effective in avoiding or minimising the impact.

TABLE 7: Applicability of types of alternatives

ALTERNATIVE TYPE	AGRI-INDUSTRY	ENERGY	SOCIAL DEV. & PROPERTY	LINEAR
Location				
Project / site location	✓	✓	✓	✓
Design / layout				
Positioning of development footprint	✓	✓	✓	✓
Size / extent of development footprint	✓	✓	✓	✓
Architectural design	✓	✓	✓	
Engineering design	✓	✓	✓	✓
Size, scale and height of structures and buildings	✓	✓	✓	✓
Site access	✓	✓	✓	
Technology alternatives				
Energy generation technology (renewable, non-renewable)		✓	✓	
Chemicals (hazardous, non-hazardous, biodegradable etc.)	✓	✓	✓	
Water conservation	✓	✓	✓	
Energy conservation	✓	✓	✓	
Air emission treatment technology	✓	✓		
Industrial effluent treatment	✓	✓		
Domestic effluent treatment	✓	✓	✓	
Solid waste treatment	✓	✓		
Solid waste recycling	✓	✓	✓	
Heating and cooling systems	✓	✓	✓	
Refrigeration (electrically driven cooling)	✓			
Input materials				
Water source (municipal, surface water, groundwater, recycled)	✓	✓	✓	
Agricultural produce organically / not organically produced	✓			
Packaging (biodegradable, organic, non-plastic, recyclable)	✓			
Chemicals (hazardous, non-hazardous, biodegradable)	✓	✓	✓	
Energy (renewable, non-renewable)	✓	✓	✓	
Energy (coal, fuels)	✓	✓	✓	
Building / construction materials	✓	✓	✓	✓
Operational aspects				
Mode of transport	✓	✓	✓	
Transport routes	✓			
Packaging (biodegradable, organic, non-plastic, recyclable)	✓			
Chemicals (hazardous, non-hazardous, biodegradable)	✓	✓	✓	
Energy (renewable, non-renewable)	✓	✓	✓	
Energy (coal, fuels, gas)	✓	✓	✓	

4.6 Developing Terms of Reference for specialist studies

The EAP would generally be responsible for drawing up the Terms of Reference (ToR) for specialist studies. Reference should be made to relevant guidelines when determining the scope of a specialist study. Guidance in this regard can be obtained from the document on specialists studies that have been published by the DEA (formerly the DEAT) as part of the IEM Guideline series (refer to Table 6 in this guideline). In addition, the Western Cape's DEA&DP have published a series of guidelines on involving specialists in EIA, these being heritage, economic, biodiversity, hydrogeological, and visual and aesthetic specialists (refer to Table 6 in this guideline).

Items that should be addressed when drawing up the ToR are listed below:

- The scope of work required to assess impacts raised in relation to the project and its alternatives, as well as the "no-go" option.
- The need to consider background trends or likely scenarios that may influence the assessment;
- The need to consider relevant policies, guidelines and plans;
- The determination of the significance of impacts and benefits, based on a specified agreed methodology discussed in consultation with the specialist.
- The identification important gaps in information, inherent uncertainties and/or risks.
- The recommendation of mitigation measures that would assist in avoiding or at least minimising possible impacts, for each phase of the development (design, pre-construction and construction, operation and decommissioning and closure (if relevant)).
- The determination of the significance of the impacts before and after mitigation.
- The provision of recommendations to optimise or enhance potential benefits.
- The likelihood of mitigation being effective and/or implemented.
- The need to comment on the cumulative impacts related to the proposed development, if relevant.
- The need to liaise with other specialists within the EIA team at particular points.
- The need to contribute to the public participation process.

Important points for the EAP to note are as follows:

- The EAP must ensure that specialists have appropriate experience. Where possible, specialists that are registered with a professional organisation should be appointed (not all professions are organised in this manner). If it is clear that the Specialist is "out of his/her depth" the EAP may have to cut the appointment short and find an alternative specialist.

- The EAP must consult the specialist about the ToR. The specialist will be able to identify requirements based on his / her expertise, possibly more effectively than the EAP. Furthermore, the EAP should consult the specialist regarding the criteria and methods that should be applied to the assessment of impacts.

- The EAP must make provision for specialists to interact with each other. It is advisable for the EAP to organise such team working sessions at key stages in the process in order to ensure cross-pollination of ideas and findings within the team. The EAP is responsible for ensuring that specialists fulfil their ToR. If the Specialist has not done so, then the EAP must ensure that the Specialist report is revised until it meets these requirements. If there is conflict about the extent to which the ToR has been met, an independent review may need to be undertaken.

- The EAP is responsible for ensuring that information from specialist studies is integrated into the EIAR. If information or recommendations are conflicting information or comes from specialists, it is advisable to conduct a working session with all the specialists in order to understand the links and inter-relationships between environmental issues. The team (specialists and EAP) can agree the position that should be reported. This will result in a more integrated approach.

In terms of defining the scope and focus of the specialist studies it can be useful to determine the questions that need to be answered. This can assist the scoping of the study as well as ensuring that it focuses on the relevant issues. The list of questions in Annex B should assist in this regard.

A worked example is given alongside that demonstrates the importance of including the issues that are related to the project itself (e.g. risk to community of using a hazardous substance) and the issues that emerge from the social setting (e.g. farm community's concern about being prioritised in respect of employment opportunities) in the scope of the social study. Thus, whilst there are issues that would typically be addressed in almost all social studies, the scope of the study must be customised to meet the unique issues related to the social environment and / or to the project.

A WORKED EXAMPLE

A social impact assessment is needed for an agri-industry that is being proposed on a fruit farm. It is proposed to use ammonia for chilling purposes. Ammonia is a hazardous substance. This means that a MHI risk assessment will be required. The project will be located in a rural area. There is a small farm labourer's village about 500m away from the proposed facility. This community has lived and worked on the farm for several generations. The nearest town is about 1 kilometre away. Unemployment in the town is quite high and these local communities are in favour of the project because of the job opportunities. People living on the farm would like the opportunity to learn new skills. Given their ties to the area, they believe they should be given priority in terms of employment opportunities at the proposed factory.

Key questions that need to be addressed in the social study are as follows:

- What risks does the project pose for the farm community and the nearby town?
- What employment and local business opportunities does the project present?
- What skills and services are available within the local area that could be procured by the facility?
- What skills are required by the facility for its operation and are these skills readily available in the local area?
- Are there any community-based projects within the area or in close proximity to the site that could be adversely affected by the project or that could benefit from the project?
- What potential economic knock-on benefits does the project offer in the context of the local economy?
- How should the Applicant / developer set up its risk communication programme and what should this programme comprise?
- What effect could the facility have on the farm community in respect of its existing culture, norms and social networks?
- How should the Applicant / developer deal with potential competition for jobs between the farm community and the town community?
- How many permanent jobs will be created? How many permanent jobs will be created at each job level (labourer – manager)?

It is likely that as information is gathered in respect of the above questions, that further questions will arise. It will be necessary for the social specialist and the MHI risk assessor to liaise with each other.

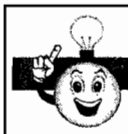
4.7 Undertaking public participation

There are a number of guidelines that have been published regarding public participation (e.g. the IEM Information Series published by the Department of Environmental Affairs and Tourism). As a general rule, particularly for the types of developments that fall within the sectors that are the subject of this guideline, basing the public participation process on the minimum requirements as set out in the EIA Regulations is unlikely to be adequate. These developments are complex and to this end the process should be based on an appropriate level of participation. In this regard, reference should be made to the document entitled 'Stakeholder Engagement', published in 2002 by the Department of Environment Affairs & Tourism (Integrated Environmental Management Information Series 3) or an equivalent. This means that the EAP should not blindly follow the requirements of the EIA regulations (i.e. adopt a tick-the-box approach).

By way of guidance, involvement is considered a more appropriate and acceptable level of participation than that of consultation, particularly in the case of large-scale projects. Involvement is based on working directly and consistently with stakeholders to ensure that their concerns are addressed throughout the process. Consultation is based on receiving feedback from stakeholders and keeping them informed.

Some general considerations for the PPP are given below:

- The independent EIA consultant must ensure that information is presented in an accessible manner, using clear and simple language.



IMPORTANT POINTS TO REMEMBER

Useful tips for conducting public participation in rural areas and informal settlements

- Translators and interpreters must be used where necessary.
- Security or police escort to be requested where there is reasonable apprehension that safety of officials will be compromised.
- Involve community leaders and community associations to facilitate more effective participation.
- Site notices must be in the language that is mostly spoken in the area otherwise they will be disregarded or seen as a way excluding the locals.
- Use should be made of the radio where there is a high level of illiteracy.
- The PPP must be sensitive to cultural norms. For example, in most rural areas traditional leaders are regarded with high respect, it is therefore always wise to consult them first. Generally, the traditional leader determines the other people that need to be informed. Thus, traditional leaders should be consulted first, before any other leadership (e.g. religious leaders).
- Meetings with community leaders should be undertaken – newspapers do not reach everyone; face to face meetings with representatives are preferred.

- An independent facilitator should undertake the PPP in circumstances where the project is located in a sensitive area from an environmental and social point of view and has the potential to be controversial, rather than the EIA consultant. A high-level of specialist facilitation expertise may be warranted for these projects due to their complexity and the potential for conflicts to arise.

- It is considered bad practice for the developer to undertake any public participation activities, such as publishing newsletters and the like. The implementation of the PPP must be left entirely in the hands of the independent facilitator or public participation practitioner including the preparation of newsletters, information sheets, posters, background information documents, advertisements and any other documentation required for the process.

- The PPP must make provision for different languages of I&APs. In addition, appropriate communication tools must also be employed. In communities where literacy is an issue, a means to obtain or record verbal submissions should be implemented. This issue is of

particular relevance to linear projects, where several communities over a wide area could be affected by the project.

- The person responsible for the PPP should always liaise with the social scientist/specialist on the team. This is in order to ensure that the PPP is structured to enable local and traditional knowledge to be accessed. In addition, the social scientist would often conduct interviews and focus groups to obtain information for the purposes of the Social Impact Assessment. It is important that the PPP and any consultation that is undertaken for the purposes of gathering social information dovetail.

- In the EIA documentation (i.e. BAR, Scoping Report, EIAR), the description of the PPP must include an explanation of how the input from I&APs influenced the project. If the public participation process did not change the project in any way or influence the EIA process an explanation as to why this is the case must be given.

- Consideration should be given to making financial provision for I&APs to obtain access to professional expertise, particularly for complex projects. A fund that is independently administered could be set up by the developer for this purpose, which would have to be on a 'no strings attached' basis. This may be of particular relevance for highly technical projects, such as those in the energy (e.g. nuclear power plant) and possibly the agri-industry sectors. The purpose thereof would be to enable I&APs to access skills to assist them to understand highly technical matters relating to environmental risks.

- The making of commitments that are conditional on the community support for the project is unacceptable. This is different to, for example, stating that if approval is obtained, an employment policy of 'local first' will be adopted. Any party that is aware of conduct that can be considered as coercion should inform the relevant competent authority of this concern. Proposed projects for the community (e.g. the building of a school or clinic; the establishment of a Community Trust) should not be linked to the project in any way. Such initiatives fall within the category of Corporate Social Responsibility and are therefore voluntary in nature. This means that they have no bearing on whether the project should be authorised or refused.

- The only advertising that should be undertaken is that required in terms of the EIA Regulations. This is often a concern with large-scale property projects, where the development is advertised (e.g. "lifestyle" estates) before approvals are granted.

- Advertising and notifications must take account of the official language groups of I&APs.

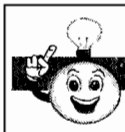
- Any petitions that are submitted by I&APs, whether for or against the development, must be accompanied by a sworn statement, signed in front of a Commissioner of Oaths, that there has been no coercion involved in initiating the petition and that signatories understood the content of what they have underwritten.

4.7.1 Categories of I&APs

The typical categories of I&APs would include:

- *Local communities*: These would include the general public (individuals) located in the vicinity of the project. It is important to understand local community structures in order that the leadership can be adequately consulted. This can be an extremely complex exercise, particularly where there is a diversity of communities that need to be considered. The EAP/independent facilitator and social specialist need to work together in this regard. In rural communities it is of particular importance to be respectful of traditional leadership structures.

- *Commenting authorities / organs* of state that have an interest in the project or that have a decision-making role in the context of their legislation.
- *Environmental NGOs*: These may be organisations that operate at a national level to localised groups. Whilst many of these bodies are concerned with issues relating to natural resources, some are focused on specific environmental issues (e.g. GroundWork is involved in air quality; Earthlife Africa is involved in nuclear energy). Those organisations involved with cultural, historical or heritage issues also fall into this category (e.g. historical societies, aesthetics committees).



IMPORTANT POINTS TO REMEMBER

Dealing with commenting authorities

- Commenting authority to give comments to the EAP and copy them directly to the competent authority.
- EAP to make every reasonable effort to get comments and to retain proof of efforts. For example, the EAP could set up interviews with the commenting authority in order to obtain their input. The minutes of the meeting would serve as a record of the commenting authority's views. These minutes must be provided to the commenting authority for confirmation.
- At the stage of draft EIAR, if no comments are forthcoming, the EAP should consider writing to the authority concerned. For example, the EAP could in his/her written communication state that if no comments are forthcoming within a certain timeframe then it will be assumed that there are no comments and this will be recorded as such in the EIAR.

- *Professional or business organisations*: Such organisations include business groups (e.g. local Chamber of Commerce) or professional organisations (e.g. Institute of Architects).

Local communities must always be consulted as must commenting authorities. The EAP must apply his / her mind as to which I&APs should be contacted. The municipality's advice can be sought in this regard. I&APs will also register in response to adverts and notices (e.g. site notice, notices at local libraries). The EAP needs to determine specific I&APs that may be relevant to the proposed development. Some examples for the sectors covered in this guideline are listed below.

TABLE 8: I&APs that may be relevant to particular sectors

SECTOR	POTENTIALLY RELEVANT I&APS
Agri-industrial	• Department of Agriculture, Forests and Fisheries • AgriSA or regional agricultural organisations • Farmers associations or co-operatives • Relevant industry organisations
Energy	• Environmental NGOs focused on energy and / or climate change issues • Department of Energy • Environmental Health Department in the municipality • Provincial department responsible for air pollution matters • Directorate responsible for air pollution within DEA • Body that controls / manages energy issues (e.g. National Nuclear Regulator)
Large-scale property development	• Planning Department in the municipality • Local heritage or aesthetics committee • Local conservation organisations and/or authorities • Department of Water Affairs (if rivers or wetlands involved)
Social infrastructure and housing	• Provincial and municipal housing and engineering departments • NGOs involved in human settlement issues (e.g. community market gardening) • Transport organisations (e.g. bus companies, taxi associations)
Linear projects	• Road or rail safety transport association (if relevant) • Department of Water Affairs (if stream crossings involved) • Local conservation organisations and/or authorities

4.7.2 Using dispute resolution methods

Dispute resolution is a collaborative process where all the parties involved in a dispute come together in an attempt to amicably resolve the problem. The parties can either attempt to resolve the problem amongst themselves or a third party who has no personal interest in the matter can facilitate and mediate the resolution process. The dispute resolution process allows opportunities for both sides to put forward their concerns. As a result of having their views considered, the parties are more likely to support the final outcome. Dispute resolution allows the parties to be creative and foster better relationships and provides an opportunity for new ideas to be generated to address problems. It is a useful tool and should be encouraged to resolve disputes during the EIA process, so as to avoid unnecessary litigation.

4.7.3 Dealing with the question of expropriation

While expropriation does not directly tie in with the EIA process, there are sometimes practical implications for applicants where land needs to be expropriated. Land prices may be inflated by landowners who, as a result of the EIA process, realise the importance of their land to the applicant. This situation and possible ways to avoid it are discussed in the case study below.

WORKED EXAMPLE

The construction of a gas pipeline requires land to be expropriated along the route. As soon as owners hear via the EIA public participation process that their land is required for the pipeline, or that an environmental authorisation has been granted for a specific route, they immediately raise the price at which they are prepared to sell their land or grant a servitude across it.

How can this situation be avoided?

There is no connection between the EIA process and the expropriation process; an EIA process can be conducted on land that is not owned by the applicant, therefore expropriation could in theory take place before the EIA process is started, during it, or after an environmental authorisation has been granted. In the case of a linear development such as a gas pipeline, the difficulty is that the route of the pipeline will be determined by the investigations undertaken during the EIA, so it is often not possible to purchase or expropriate the necessary land or rights of way over the land before the EIA is concluded.

In the case of non-linear developments, the consent of the landowner is necessary where the applicant for an environmental authorisation is not the landowner. Where the applicant is an individual or entity in the private sector he, she or it has the option of purchasing the land first and then making application for authorisation, removing the possibility that the landowner will negotiate a higher price once he or she realises the value of the land to the applicant, but taking the risk that the listed activity may not be authorised after an EIA process. However, if the applicant is a public entity it may be obliged by its procurement policy to undertake the EIA process before purchasing the land.

A possible solution in this case study may be for the Applicant to purchase the land or rights of way over the land subject to the condition that the sale agreement will lapse if an environmental authorisation is not granted within a specific time, or if the route of the pipeline as authorised by the competent authority excludes the property in question. This would allow the applicant to negotiate a price for the land or rights, before the EIA process is started.

4.8 Assessing the significance of impacts

The assessment and evaluation of potential environmental impacts is probably the most important step in the EIA Phase, because it is concerned with predicting the potential consequences of the proposed development and the significance of these effects on the environment (biophysical and socio-economic) before and after mitigation. There are various methods for assessing and evaluating impacts, including checklists, matrices, networks, overlays and computer expert

systems. A useful summary of some of these is available in the DEAT (2002) IEM Information Series Document 5 on Impact Significance. Generally, the process of impact assessment and evaluation involves a number of steps as shown in the table below (e.g. Canadian Environmental Assessment Agency, 1994):

TABLE 9: Key steps in assessing impact significance

STEP	CRITERIA
Step 1: Deciding whether the environmental effects are adverse	The quality of the existing environment is compared with the predicted quality of the environment once the project is in place. For example, negative effects on human health, well-being or quality of life.
Step 2: Deciding whether the adverse environmental effects are significant	Criteria used are: • Conformance with spatial plans, policies and guidelines, including the NEMA principles • Geographic context • Duration and frequency • Degree to which the adverse environmental effects are reversible or irreversible • Ecological context • Social context • Conservation targets • Degree of change relative to current situation • Social structure and values • Internationally accepted health and safety standards
Step 3: Deciding whether the significant adverse environmental effects are likely	Criteria used are: • Probability of occurrence • Scientific uncertainty
Step 4: Deciding whether proposed mitigation measures are adequate or not	Criteria used are: • Residual risk/impact • Scientific uncertainty • Internationally accepted standards • Environmental thresholds (e.g. water quality standards)

There are various methods for determining whether an adverse environmental effect of a project is significant or not. Reference in this regard can be made to the IEM Information Series No. 5 published by DEAT (now DEA), which deals with Impact Significance. Significance criteria should be appropriate to the circumstances. It is important that the EAP establish clear evaluation criteria and that these are fully explained in the EIAR. In this regard, factors or criteria that should be included in evaluating the significance of impacts include:

- Environmental standards or objectives (e.g. water or air quality), thresholds, targets (e.g. biodiversity conservation), guidelines and other environmental quality objectives.
- Level of public concern (including both norms and values).
- Irreplaceable loss or deterioration of biodiversity, and/or of valued resource stocks, and/or ecosystem services.
- Irreplaceable loss or deterioration of heritage resources, cultural or indigenous norms and values and/or of social structure and support systems.
- Foreclosure of land and resource use opportunities.
- Contribution to decreasing the gap between wealthy and poor, vulnerable communities.
- Equity in the distribution of impacts and benefits between communities and between communities and individuals.

The EAP must ensure that an appropriate methodology is used for determining the significance of impacts. Significance can, for example, be defined by any of the following (or combination thereof):

- statistically (e.g. risk levels, % loss of a resource)
- by legal standards and guidelines;
- adopted plans and policies (relevant to the location such as an SDF or relevant to the sector such as an energy plan);
- traditional and local knowledge;
- established / known good practices;
- public perceptions or values;
- authority views; and
- need and desirability factors.

The methodology that is used to determine significance should consider both the applicable objectives and the baseline environmental situation where the project is being proposed. This allows the assessment to be objectives-driven whilst taking account of the existing environmental parameters. The overarching issue to be addressed is: "What is the significance of this impact given the objectives applicable to the project and the environmental setting in which it is being proposed?" The objectives applicable to the project can be derived from the NEMA principles, from policies and plans adopted for the area or type of development (e.g. energy policy, housing policy) and from objectives that the Applicant, design team and EAP have determined for the project (e.g. to adopt a "green" building approach).

Care must be taken when using methodologies that combine a number of criteria into one assessment factor, as is the case where the impacts are rated in terms of extent, severity, magnitude, duration and the like. Some of the criteria that make up each of these elements or factors (e.g.

PRACTICAL EXAMPLES

- **AGRI-INDUSTRY:** Industrial effluent will be produced, which will have a high COD (Chemical Oxygen Demand). Consideration is being given to disposing it into a nearby river. There is concern about the impact on aquatic ecology. The specialist finds that the impact will be of high significance. If the effluent is not treated to improve its quality, this impact will be long-term and will disrupt the ecological functioning of the river. In order to avoid or minimise this impact, consideration will have to be given to on-site treatment or to not disposing the effluent to the river (e.g. disposal to landfill). Alternatively, the impact could be resolved by changing the manufacturing process. Ultimately an engineering solution will be required to resolve the issue. Without mitigation the impact will be of high or very high significance. The alternative mitigation measures need to be assessed to determine the most effective from an environmental perspective. The significance of the impact will then be rated for each of these mitigation options to provide a comparative assessment.
- **ENERGY:** A power station is being proposed on agricultural land on which maize is being grown. The site will be 300ha in extent. It has water rights attached to it. The provincial Department of Agriculture's plan shows that the area must be maintained for agricultural purposes as it is one of the most productive maize growing areas in the country. If the development goes ahead the loss of agricultural land will be of high significance. (i.e. permanent, irreversible impact). An impact such as this may represent a "fatal flaw" meaning that it is of sufficiently high significance to result in the project being refused. In these circumstances, if the significance of the agricultural issue is determined at a very early stage in the project planning process, this increases the ability of the Applicant to identify an alternative less sensitive site.
- **SOCIAL INFRASTRUCTURE & HOUSING:** A low cost housing development is proposed on 300 ha of agriculturally productive land that the provincial Department of Agriculture considers of strategic importance from a food security point of view. As a result it is determined that at least 100ha should be retained for agricultural purposes, which is to be run by the community. An additional 20ha will be set aside for market gardening. In this scenario, there will not be a total loss of agriculturally productive land as is the case with the energy sector example given above. In assessing the impacts, it will be necessary to consider the beneficiary community's values, the views of the Department of Agriculture and take into account social impacts and benefits as well as the findings of the agricultural specialist. The assessment of this impact is not as straight forward as the energy example – it requires a multidisciplinary approach.

magnitude or severity) may be more important than others depending on the nature of the development and the receiving environment. In these circumstances, the EAP should highlight the priority criteria and ensure that these play a prominent role in the significance rating. For example, the permanent loss of irreplaceable biodiversity will be a significant impact that cannot be mitigated. The significance of this impact should ordinarily not be downgraded (e.g. from high to medium) if the spatial extent of the impact is considered to be small, by virtue of the fact that the biodiversity is irreplaceable. Furthermore, in an objectives driven approach, the significance should take cognisance of the impact in the context of conservation targets, if available.

When presenting the overview of the significance of impacts, the EAP must ensure that priority criteria do not get lost in the process of merging or combining of ratings to obtain an overall significance level. Consideration must be given to the inter-relationships between environmental elements in the evaluation of significance (e.g. potential "downstream" or "knock-on effects"). EIA team sessions should be convened so that impact significance can be determined on the basis of input from all specialists and the EAP. This assists in achieving an integrated approach to impact assessment as well as enabling linkages and inter-relationships between issues to be addressed. For example, the results of the MHI Risk Assessment are of relevance in answering concerns about health and safety risks to the community. Similarly, the visual impact assessment is relevant in terms of social impacts (e.g. sense of place).

Some factors or criteria that can be applied in assessing the significance of impacts are shown in Table 9. The potential changes in the environment are shown in the left hand column and the potential consequences for people are shown in the right hand column. This serves to demonstrate the links or dependencies between human systems and natural systems, where applicable. There may be many other relevant factors, depending on the project and its location.

TABLE 9: Factors or criteria for use in determining significance of negative impacts

CHANGES IN THE ENVIRONMENT	CHANGES FOR PEOPLE
• Deterioration of quality and/or quantity of the physical resources (surface water, groundwater, soil, land, and air).	• Negative effects on human health, well-being, quality of life • Expose people to hazards.
• Loss of or decline in agriculturally productive land.	• Threat to food security
• Loss of or decline in Critical Biodiversity Areas.	• Threat to ecotourism and nature-based recreational activities • Threat to the maintenance of ecosystem services
• Loss of or decline in commercial species	• Increase in unemployment • Shrinkage in the economy
• Loss of or decline in species used by local communities	• Threat to sustainable livelihoods • Decline in income generation opportunities
• Threat to rare or endangered species	• Threat to the maintenance of ecosystem services
• Reductions in species diversity or disruption of food webs.	• Threat to ecotourism and nature-based recreational activities • Threat to the maintenance of ecosystem services
• Loss of or damage to habitats, including habitat fragmentation.	• Threat to ecotourism and nature-based recreational activities • Threat to the maintenance of ecosystem services
• Obstruction of migration or passage of wildlife.	• Threat to the maintenance of ecosystem services
• Destruction of breeding habitat of faunal species	• Threat to the maintenance of ecosystem services
• Transformation of natural landscapes	• Decline in visual amenities (e.g., views) • Decline or loss of "sense of place."
• Decline in water resources (e.g. through over abstraction)	• Threat to the security of water supply for other water users
• Decline or changes in predator, large, or long-lived species	• Threat to the tourism industry
• Negatively affect groundwater recharge patterns	• Threat to the sustainability of water supply.
• Loss or degradation of rock or soil stability	• Threat to farming / agricultural potential

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	• Threat to built structures
CHANGES IN THE ENVIRONMENT	**CHANGES FOR PEOPLE**
• Loss or degradation of unique geological features	• Threat to ecotourism and nature-based recreational activities • Decline in visual amenities (e.g., views)
• Negatively affect potential for restoration of degraded ecosystems.	
	• Loss or degradation of historical, archaeological, paleontological or architectural resources
	• Loss of or decline in areas used for community and cultural purposes.
	• Disruption of social networks and structures.
	• Detrimental change in the current use of lands and resources for traditional purposes by local communities.
	• Displace people or communities.
	• Threat to integration or coherence of communities.

Any impact that could result in the loss, decline or deterioration of biodiversity or natural ecosystems has the potential to impact negatively on local communities and society in general. This is because humankind is dependent on the multitude of resources and processes that are supplied by nature. Collectively, these benefits are known as ecosystem services. Based on the United Nations 2004 Millennium Ecosystem Assessment (MA), ecosystem services have been defined in terms of four broad categories:

- *provisioning*, such as the production of food and water;
- *regulating*, such as the control of climate and disease;
- *supporting*, such as nutrient cycles and crop pollination; and
- *cultural*, such as spiritual and recreational benefits.

The EIA must consider the environmental impacts with and without mitigation. In this respect, it must be borne in mind that the mitigation hierarchy must be applied (refer to Figure 4). This is in accordance with the NEMA principles. Besides principle 2(a)(viii) which states that negative impacts on the environment and on people's environmental rights must be **anticipated and prevented**, and where they cannot be altogether prevented, must be minimised and remedied, principles 4(a)(i)-(iv) make reference to **avoiding** impacts and where these cannot be avoided to minimising and remedying them. Thus development alternatives that show the highest level of avoidance of negative environmental impacts would be the most environmentally acceptable and sustainable, based on the NEMA principles.

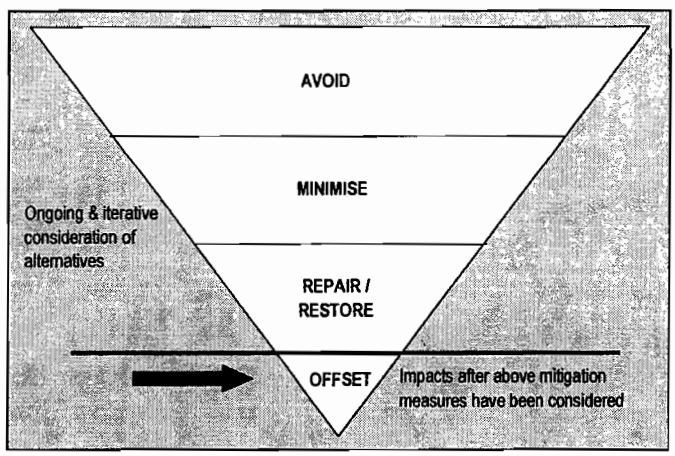

FIGURE 4: The mitigation hierarchy[119]

[119] Guideline on Biodiversity Offsets (Draft Edition 2, April 2007) – DEA&DP (Western Cape)

The NEMA principles are one of the primary tools for achieving sustainable development because they recognise that the consideration of environmental factors requires the integration of social, economic and ecological factors into decisions. They are applicable to all decisions that relate to the interpretation and implementation of NEMA and other laws concerned with environmental management or protection. It is therefore important that the EIA consider the NEMA principles for two key reasons:

- To determine whether the proposed development meets the "sustainability test", that is, does it represent a move away from or a move towards sustainable development.
- To enable the decision-maker to consider the development proposal in light of these principles, which they are obliged to do.

The primary principle is that development must be socially, environmentally and economically sustainable. The other principles flow from this and include the following:

- the social, economic and environmental aspects of activities, including their disadvantages and benefits must be considered, assessed and evaluated, and decisions must be appropriate in light of such consideration and assessment;
- the use and exploitation of non-renewable natural resources must be responsible and equitable, and must take into account the consequences of the depletion of natural resources;
- the development, use and exploitation of renewable resources and the ecosystems of which they are part must not exceed the level beyond which their integrity is jeopardised;
- a risk-averse and cautious approach must be applied, which takes into account the limits of current knowledge about the consequences of decisions and actions;
- negative impacts on the environment and on people's environmental rights must be anticipated and prevented, and where they cannot be altogether prevented, must be minimised and remedied;
- decisions must be taken in an open and transparent manner, and access to information must be provided in accordance with the law; and
- decisions concerning the environment must take into account the needs, interests and values of all interested and affected parties.

In summary, the EIAR needs to be presented in a manner that answers the following questions:

- What are the impacts and benefits?
- What is the significance of each impact and benefit and why?
- What criteria have been used to determine significance?
- What information or knowledge gaps are there in relation to the prediction of impacts?
- What risks and uncertainties are there in the prediction, assessment and evaluation of impacts?
- Can any of the impacts be avoided?
- Where impacts cannot be avoided, can they be minimised and if so, to what extent?
- Are mitigation measures to minimise impacts known to be effective or are there uncertainties?
- What are the residual impacts (impacts remaining after mitigation)?
- Which alternative would be most appropriate from an impacts and benefits perspective?
- Can the development proposal be considered to be consistent with the NEMA principles?
- In terms of social aspects, which communities and/or individuals stand to gain and which stand to lose? For those that stand to gain, what will they gain and at what cost to other members of society and the environment?
- Does the project (with mitigation) conform to the objectives in adopted environmental plans and community goals?

4.9 Approaching the Environmental Management Programme (EMP)

It is necessary to include a Draft EMP in the EIA Report. Reference should be made to relevant guidelines in this regard (Refer to Table 7 in this document). The EAP must ensure that the EMP is practical. Specialists should be consulted for input into the EMP. The EAP should draw on methods that have been proven to be effective in minimising, managing and controlling environmental impacts. If necessary, technical experts may need to be consulted (e.g. engineers) when compiling the EMP. The EAP must ensure that all residual impacts are addressed in the EMP. Furthermore, the EAP must cross-check information to ensure that issues raised in the Scoping process have been addressed in the Impact Assessment and that all impacts are addressed appropriately in the mitigation measures provided in the EMP. This is critical to ensure that impacts are avoided or where they cannot be avoided, are minimised.

The EMP must detail mitigation measures for each environmental impact for:

- Design;
- Pre-construction and construction activities;
- Operation;
- Rehabilitation; and
- Closure (where relevant).

The EMP is an action plan that deals with the measures required to mitigate and manage impacts and will therefore detail:

- The mitigation measures (what needs to be done and how).
- Roles and responsibilities for implementation (by whom actions need to be undertaken).
- Timeframe or programme (by when actions need to be completed or if they are ongoing).

Monitoring requirements must also be detailed in the EMP. The following information is required in respect of monitoring:

- Monitoring requirements and methods (what needs to be monitored and how).
- Monitoring roles and responsibilities (who will conduct monitoring or if not known at this stage, how appropriate monitoring services will be obtained).
- Frequency of monitoring / monitoring programme (when to monitor).
- Analysis of monitoring data (what must the monitoring results show or reveal).
- Application of monitoring results (what to change or correct).
- Reporting requirements (to whom and how frequently).

It has become common practice, when determining the significance of impacts, to show a reduction in rating in the after mitigation scenario, based on an EMP being the primary mitigation measure. Clearly, this approach has limitations, since it is based on the assumption that the EMP will be effectively implemented and that its content will address all impacts comprehensively. The purpose of the draft EMP is to address this issue, that is, to set out the mitigation measures so that the decision-maker can assess whether these are likely to be effective or not. In the event of the proposed development being authorised, it will be necessary for the Applicant to ensure that the draft EMP from the EIAR is updated to take account of the conditions in the authorisation.

The effectiveness of the EMP as a mitigation tool will largely be determined by its implementation. This is particularly true of impacts that require the application of control measures on an ongoing basis. For example, the potential impacts associated with storing hazardous chemicals on the site

can only be achieved if the correct procedures for unloading, storage and handling of these substances are adhered to **all the time**. Thus, the downgrading of the significance of impacts in the EIAR on the basis of the implementation of an operational EMP (or an Environmental Management System such as ISO 14001) must be approached with caution. This is due to the fact that the mitigation of impacts associated with the operation of the project is dependent on how effectively the operational EMP or EMS is implemented. In general, a greater level of confidence can be attached to mitigation measures that involve "hard" solutions (e.g. engineering or technological measures) as opposed to "soft" solutions such as a management system.

5 Assessment of job well done

In this section criteria that can be used by both practitioners and consultants will be provided to assist in determining whether the EIA process and documents that have been produced meet acceptable professional standards as well as the requirements of the EIA regulations. These criteria will be drawn from typical measures of quality and adapted for the purposes of the guideline. Aspects such as clarity, objectivity and quality of information will be covered.

When determining whether an EIA process has been adequate, it is important to bear the purpose of this process in mind, which is to:

1. Determine whether and how adverse environmental effects can be avoided or minimized before they occur.
2. Provide information to enable environmental factors to be incorporated into decision making.

The role of the EAP is to undertake the process in a thorough and objective manner. It is not the role of the EAP to actively support the development proposal. The EAP's role is first and foremost to ensure that means are found to prevent adverse impacts associated with the project, or to at least minimise these if they cannot be avoided. In fulfilling this role, the EAP must ensure that the requirements of the EIA Regulations are met in all respects.

5.1 Quality assurance criteria

In accordance with principles of best practice, the objectives of EIA are as follows (IAIA, 1999)[120]:

- to ensure environmental considerations are explicitly and comprehensively addressed and incorporated into decision-making about development;
- to anticipate the effects of development proposals with a view to avoiding, minimising or offsetting significant adverse impacts and enhancing benefits;
- to ensure that the productivity and capacity of natural systems and ecological processes is protected and maintained; and
- to promote development that is sustainable.

With respect to the EIAR, it is important that the information is consistent with the terms of reference and the process followed. Specific questions to consider are[121]:

- complete — informed decision can be made?
- suitable — right type of information included?
- understandable — easily apprehended by I&APs decision maker?
- reliable — meets established professional and disciplinary standards?
- defensible — risks and impact are qualified as are uncertainties?
- actionable — provides clear basis for choice and condition setting?

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[120] IAIA in cooperation with Institute of Environmental Assessment (1999): Principles of EIA Best Practice. www.iaia.org.

[121] Sadler B (1996) *Environmental Assessment in a Changing World: Evaluating Practice to Improve Performance (Final Report of the International Study of the Effectiveness of Environmental Assessment).* Canadian Environmental Assessment Agency and International Association for Impact Assessment, Ottawa, Canada

A checklist of the contents of the EIAR is given in Table 10. This can be used to determine whether all of the relevant information has been provided.

TABLE10: Checklist for EIAR contents

ITEM	CONTENTS
Introduction	• Qualification details of the EAP and Specialists (could be referred to in report and provided in an Appendix). • Terms of Reference for the study (this must link to the Scoping Report). • Structure of the EIAR (i.e. a "roadmap").
Project Description	• Nature / type of development. • Project purpose, need and desirability of the proposed activity. • Objectives or principles applied in the project planning and design, if any (e.g. "green" building design; waste recycling). • Development footprint / scale of development. • Infrastructure and buildings. • Facilities for storage of waste, hazardous substances etc. • Emissions (air, wastewater / effluents) and waste types. • Treatment facilities for wastes, emissions and effluent, if any • Project phases and activities (construction, operation etc.) • Maps, site layout plans and photographs. • Revisions made to the project through comments received from I&APs and specialists.
Alternatives	• Overview of alternatives that have been assessed (this must link to the Scoping Report), with an explanation of how they were identified (e.g. I&AP comments, specialist inputs).

Description of baseline environment	• Key points relating to the baseline environment from the Scoping Report, highlighting aspects that are relevant to the impact assessment:
	  • Sensitive environmental features (biophysical and socio-economic).
	  • Constraints (e.g. available natural resources).
	  • Social and economic needs / requirements (trends / pressures).
	• Maps showing environmental characteristics, together with sensitivity rating or showing opportunities and constraints.
	• Brief description of specialist work undertaken for the purposes of the EIAR (e.g. field surveys with period undertaken, dates etc.).
	• New information / findings from additional specialist work (i.e. post Scoping Report).
	• Annex - full Terms of Reference for specialist studies in an Appendix.

Public participation	• Public participation activities.
	• Measures taken to resolve conflicts (if relevant).
	• Methods used for dealing with illiteracy (if applicable).
	• Issues and response trail (summarise in report and provide original comments in Annex).
	• Appendix / Annex:
	  • List of I&APs.
	  • Proof of advertisements, site notices.
	  • Minutes of meetings and records of discussions/correspondence.
	  • Original comments made by I&APs.

Assessment and evaluation of impacts, alternatives and mitigation measures	• Assessment methodology/ies applied, particularly criteria for evaluating the significance of impacts, including the NEMA principles. • Assumptions, uncertainties and gaps in knowledge and the implications of these.

ITEM	CONTENTS

Assessment and evaluation of impacts, alternatives and mitigation measures	• For each issue and alternative identified in Scoping as requiring investigation:
	  • Identify the impacts, risks and benefits for each phase of the project (i.e. design, construction, operation and where relevant decommissioning and closure).
	  • Assess the significance of each impact, risk and benefit.
	  • Describe measures that can be used to avoid or minimise impacts and risks and to enhance benefits.
	  • Evaluate the significance of the each impact and risk, assuming these mitigation measures are undertaken (i.e. after mitigation).
	  • Describe the effectiveness of the proposed mitigation measures (e.g. testing of effectiveness).
	  • Assess increase in benefits, assuming measures to enhance these are implemented.
	  • Describe any implications associated with non-alignment between the proposed development and relevant strategic and spatial plans, policies or guidelines.
	  • Describe cumulative impacts, as relevant to the proposed development.
	  • Describe links and relationships between impacts and adjust significance accordingly.
	  • Describe residual impacts and the likelihood that these could be "red flags" or "fatal flaws" (e.g. a high negative rating after mitigation may be a "red flag" whereas a low negative would probably not be considered as a "red flag").
	  • Describe the impacts of the alternatives relative to one another and which is the most appropriate alternative from an environmental impact point of view.
	  • Describe any tradeoffs that would be involved for each alternative, where applicable.

Draft EMP	• Mitigation measures for each environmental impact for:
	  • Design;
	  • Pre-construction and construction activities;
	  • Operation;
	  • Rehabilitation; and
	• Monitoring programme

Summary and conclusions	• Summary or synthesis of the impacts and their significance before and after mitigation. This table should enable comparison of positive and negative implications of the proposed activity and identified alternatives.
	• Summary of significance of risks, if any.
	• Summary of findings in relation to cumulative impacts.
	• Summary of irreversible and/or residual impacts.
	• Conclusion, that is the opinion of the EAP in respect of:
	  • The appropriate alternative/s.
	  • Residual and/or irreversible impacts considered to be "red flags" or "fatal flaws."
	  • The extent to which the development proposal meets or deviates from relevant policies, plans and guidelines.
	  • The extent to which the development proposal meets relevant principles and criteria in each area of sustainability (environmental, economic and social).
	  • The net gains (benefits) and losses (impacts) associated with the development (i.e. who and what stands to gain and who or what stands to lose).
	  • The effectiveness of proposed mitigation measures to avoid or minimise impacts and enhance benefits.
	  • Uncertainties, gaps and limitations and the implications thereof for decision-making.

It is important to ensure that the EIAR is written in a clear and succinct manner and every effort should be made to avoid "padding" the document with unnecessary detail (e.g. pages and pages of information on legislation).

5.2 Legal compliance

Compliance with legal requirements is mandatory and the decision-maker must reject applications that do not comply. Furthermore, the EAP should ensure that its independence is not compromised. Should the competent authority have reason to believe that the EAP managing the application may not be independent in respect of the application, it may after affording the EAP an opportunity to make representations regarding his or her independence, refuse to accept any further reports or input from the EAP.[122] The applicant may also be required to Commission an external review by an independent person or to appoint another EAP. These will be at the applicant's own cost.

Applications for authorisation must:

- Be made on the official application forms published by or obtainable from the relevant competent authority;
- Be properly completed and contain the information required in terms of the application form;
- Contain the written consent of the landowner for non-linear activities on land owned by a person other than the applicant;
- Contain any prescribed application fees;
- Take into account any guideline applicable to the submission of applications;
- Fulfil the requirements for public participation as set out in the Regulations or ensure that exemption is obtained if some of these activities are not undertaken;
- Include copies of any representations, objections and comments received in connection with the application;
- Include copies of the minutes of any meetings held by the EAP with I&APs and other role players which record the views of the participants;
- Include any responses by the EAP to those representations, objections, comments and views;
- Include any reports and other documents required in terms of the EIA Regulations;
- Provide the content in reports (BAR, Scoping Report, EIAR) as specified in the Regulations (Table 10 may assist in respect of the EIAR); and
- Contain a declaration of interest by the EAP on a form provided by the competent authority.

[122] Regulation 19

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C. DWAF Water Use Authorisation: Internal Guidelines:

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37. Internal Guideline: Section 21(c) and (i) Water Use Authorisation Application Process (Impeding or Diverting the Flow of Water in a Water Course, and/or Altering the Bed, Banks, Course or Characteristics of a Water Course).

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Annexes

Annex A: Legal Matrix
Annex B: Checklist of questions to assist scoping of issues.
Annex C: Activities and Impacts Matrix (Linear Development)
Annex D: Activities and Impacts Matrix (Agri-Industry)
Annex E: Activities and Impacts Matrix (Energy)
Annex F: Activities and Impacts Matrix (Large scale property development)
Annex G: Activities and Impacts Matrix (Social infrastructure)

ANNEX A: LEGAL REQUIREMENTS

	Non-linear activities associated with energy generation and supply	Non-linear aspects of large scale property development	Non-linear aspects of social infrastructure development	Non-linear aspects of agri-industry	Linear Activities
	(For example, the extraction of gas from landfills, the construction of a nuclear reactor or a coal power station).	(For example, the development of a shopping mall, a sports complex or a golf course estate).	(For example, the construction of a low cost housing estate, the construction of a hospital, a wastewater treatment plant or a landfill site).	(For example, the construction of a dam and the construction of facilities for the commercial production of animals).	(For example, the construction of roads, pipelines or power lines).
1. NEMA (ACT)					
Section 2: Principles	The responsible use of non-renewable natural resources; the wise use of renewable resources and the precautionary principle are three principles that are relevant to this activity (Section 2(4)(a)(v)(vi)and (vii)).	In property developments the most important principle to bear in mind is that the physical, psychological, developmental, cultural and social interests of people must be weighed equitably (Section 2(2)). Site locations must aim to avoid the loss of ecosystems and biodiversity (Section 2(4)(a)(i)). EMPs must show a commitment to limit pollution and degradation (Section 2(4)(a)(ii))and the generation of waste must be avoided, or where this is not possible, there should be re-use or recycling (Section 2(4)(a)(iv)). The best practicable environmental option must be chosen e.g. in choosing materials or between competing technologies (Section 2 (4)(b)) and the developer must bear in mind that the responsibility for the consequences of the activity, exists throughout its lifecycle (Section 2(4)(e)).	Social developments must ensure in particular that the physical, psychological, developmental, cultural and social interests interests of people are weighed equitably (Section2(2)) . In addition developments must ensure that environmental justice is served - for instance, low income housing must not be placed closer to harmful situations (Section 2(4)(c)) As far as possible, developments must avoid the loss of ecosystems and biodiversity (Section 2(4)(a)(i)). EMPs should aim to limit pollution and degradation (Section 2(4)(a)(ii)).The generation of waste must be avoided (Section 2(4)(a)(iv)) The best practicable environmental option must be chosen e.g. in choosing materials or between competing technologies (Section 2(4)(b).	This industry needs to be particularly aware of the triple bottom line principle which involves a weighing of the social, economic and environmental impacts of activities (Section 2(4)(i)) and that environmental management must place people and their needs at the forefront of its concern and serve their interests equitably (Section 2(2)).	These activities would need to be alert to the requirement of environmental justice when positioning infrastructure such as power lines, railway lines or pipelines (Section 2(4)(c)) People's needs must be equitably weighed (section 2(2))and where possible, harm to ecosystems and the loss of biodiversity must be avoided (Section 2(4)(a)(i)).
Section 24: Environmental authorisations	The minimum procedures contained in Section 24 must be complied with (Section 24(4)(a) and 24(4)(b)).	The minimum procedures contained in Section 24 must be complied with (Section 24(4)(a) and 24(4)(b)).	The minimum procedures contained in Section 24 must be complied with (Section 24(4)(a) and 24(4)(b)).	The minimum procedures contained in Section 24 must be complied with (Section 24(4)(a) and 24(4)(b)).	The minimum procedures contained in Section 24 must be complied with (Section 24(4)(a) and 24(4)(b)).
Section 28: Duty of care	Part of the Duty of Care is to investigate and assess the possible pollution impacts of a proposed activity. This is taken care of by the requirements of Section 24 and the EIA Regulations. Reasonable measures must be taken to prevent pollution and environmental degradation and to rectify environmental damage.	Part of the Duty of Care is to investigate and assess the possible pollution impacts of a proposed activity. This is taken care of by the requirements of Section 24 and the EIA Regulations. Reasonable measures must be taken to prevent pollution and environmental degradation and to rectify environmental damage.	Part of the Duty of Care is to investigate and assess the possible pollution impacts of a proposed activity. This is taken care of by the requirements of Section 24 and the EIA Regulations. Reasonable measures must be taken to prevent pollution and environmental degradation and to rectify environmental damage.	Part of the Duty of Care is to investigate and assess the possible pollution impacts of a proposed activity. This is taken care of by the requirements of Section 24 and the EIA Regulations. Reasonable measures must be taken to prevent pollution and enviornmental degradation and to rectify environmental damage.	Part of the Duty of Care is to assess the possible pollution impacts of a proposed activity. This is taken care of by the requirements of Section 24 and the EIA Regulations. Reasonable measures must be taken to prevent pollution and enviornmental degradation and to rectify environmental damage.

LEGAL REQUIREMENTS					
	Non-linear activities associated with energy generation and supply	Non-linear aspects of large scale property development	Non-linear aspects of social infrastructure development	Non-linear aspects of agri-industry	Linear Activities
2. PROCESS GUIDE					
Public participation					
What special considerations regarding public participation should be taken into account for this sector?	It is possible that these activities will have an impact that extends beyond the boundaries of the local municipality. If this is the case, then an advertisement has to be placed in at least one provincial newspaper or national newspaper. This applies unless a notice has been placed in an official Gazette (Regulation 56(2)(d)).	It is possible that these activities will have an impact that extends beyond the boundaries of the local municipality. If this is the case, then an advertisement has to be placed in at least one provincial newspaper or national newspaper. This applies unless a notice has been placed in an official Gazette (Regulation 56(2)(d)).	No special considerations. However, given that the basic needs of people are being addressed by social infrastructure development, it is likely that a greater degree of community involvement and consultation will be encouraged.	No special considerations.	Until the route and alternatives has been settled, it is not possible to inform landowners and the community. This notification happens after the application has been made.
Which organs of state have jurisdiction and should be included on the I&AP register?	Organs of state that will probably need to be notified are the municipal planning authorities, the Department of Mineral Resources, the Department of Health , the Department of Transport , the Department of Environmental Affairs, the Department of Water Affairs, the Department of Science and Technology, the National Nuclear Regulator and heritage authorities.	Organs of state that will probably need to be notified are the municipal planning authorities, the Department of Agriculture, Forestry and Fisheries (national and provincial), the Department of Transport, the Department of Environmental Affairs, the Department of Human Settlements, the Department of Environmental Affairs and heritage authorities.	The organs of state that will probably need to be notified are the municipal planning authorities, the Department of Human Settlements, the Department of Environmental Affairs, the Department of Agriculture, Forestry and Fisheries (national and provincial), the Department of Transport, the Department of Water Affairs and heritage authorities.	The organs of state that will probably need to be notified are the municipal planning authorities, the Department of Agriculture, Forestry and Fisheries (national and provincial), the Department of Environmental Affairs, the Department of Transport, the Department of Water Affairs and heritage authorities.	The organs of state that will probably need to be notified are the municipal planning authorities, the Department of Environmental Affairs, the Department of Agriculture, Forestry and Fisheries (national and provincial), the Department of Transport, the Department of Mineral Resources, the Department of Water Affairs and heritage authorities.
Alternatives					
What alternatives should be considered for this kind of development? (regs 23(1)(g) and 28(e)(iii))	Alternatives that could be considered are the different methods of electricity generation (including using renewable sources) and their respective resource usage, different technologies as well as different locations and different scales of operation.	Alternative land uses , locations, nature and scale of development should be assessed.	Alternative locations, nature and scale of development should be assessed. In addition alternative technologies may need to be considered.	Alternative land uses, locations, nature and scale of development should be assessed.	Alternatives relate to different route determinations. It is necessary to see which are the most economically viable, topographically feasible and least environmentally damaging. Technology alternatives may need to be considered.
Exemptions					
In what circumstances could an applicant in this sector obtain exemptions and from what regulations?	Given the significance of the method of energy generation and the demand for supply, it is unlikely that any exemptions from any part of the public participation process would be allowed. It is possible that other exemptions would be granted, such as the need to investigate alternatives, if for instance, the government had already made a policy decision that a certain type of energy was to be favoured.	Large scale property developments may not need to investigate need and desirability if for instance planning work such as SDFs have already identified the preferred site and a recognised need.	Social infrastructure developments will probably be able to be exempt from showing need and desirability as this may already have been ascertained.	Even if these activities are contemplated in areas outside those zoned for industry, given the more limited nature of their impact on the environment and the fact that they would probably be established on land outside the urban edge, it is possible that an exemption from public participation requirements may be given.	Permission may be granted to submit a single application. However while the process may be consolidated, impacts in different places must be separately considered.

LEGAL REQUIREMENTS					
	Non-linear activities associated with energy generation and supply	**Non-linear aspects of large scale property development**	**Non-linear aspects of social infrastructure development**	**Non-linear aspects of agri-industry**	**Linear Activities**
Authorities					
Who is the competent authority?	The competent authority is generally the provincial department of the environment. If, for example, the construction of a hydro-electric power station is envisaged on the border of a neighbouring country, the national Minister of Environmental Affairs must authorise the activity (Section 24C(2)(c)).	Generally the provincial department of the environment.	The competent authority is generally the provincial department of the environment. However, in this sector the applicant is likely to be a national or provincial department or a statutory body performing a function that is exclusively within the sphere of national government (For example where the Department of Human Settlements is the applicant and the activity is the bulk transportation of water to supply a new RDP housing development). In those cases, the national minister must authorise the activity (Section 24C(2)(d)).	The competent authority is generally the provincial department of the environment. The national minister would probably only be involved if the facility was to be established in an area that traversed a provincial boundary.	The competent authority is generally the provincial department of the environment. However, pipelines, railways, roads and power lines will often traverse provincial boundaries. In those cases, the competent authority will be the national minister (Section 24C(2)(c). If the applicant is a national or provincial department or a statutory body performing a function that is exclusively within the sphere of national government ((for example, SANRAL building a national road), the national minister is the competent authority (Section 24C(2)(d)).
Is consultation necessary with other competent authorities in terms of regulation 6?	Where there are substantially similar applications for authorisation under different legislation, the competent authority must enter into a written agreement with the other authority to co-ordinate requirements and avoid duplication. This obligation is not relevant to any energy related legislation unless the mining of the energy resource (such as coal) is also part of the activity at the site. If so, the Department of Mineral Resources and the competent authority must enter into a written agreement to ensure co-operation.	Where there are substantially similar applications for authorisation under different legislation, the competent authority must enter into a written agreement with the other authority to co-ordinate requirements and avoid duplication. If the developers have chosen to follow the Development Facilitation Act procedure, for instance to develop land for residential use, then the competent authority must enter into a written agreement with the Department of Rural Development and Land Reform and the Department of Human Settlements.	Where there are substantially similar applications for authorisation under different legislation, the competent authority must enter into a written agreement with the other authority to co-ordinate requirements and avoid duplication. If the developers have chosen to follow the Development Facilitation Act procedure to fast-track a RDP project, then the competent authority must enter into a written agreement with the Department of Rural Development and Land Reform and the Department of Human Settlements.	Where there are substantially similar applications for authorisation under different legislation, the competent authority must enter into a written agreement with the other authority to co-ordinate requirements and avoid duplication. If the developers have chosen to follow the Development Facilitation Act procedure for their agri-industry activity, then the competent authority must enter into a written agreement with the Department of Rural Development and Land Reform and the Department of Human Settlements.	Where there are substantially similar applications for authorisation under different legislation, the competent authority must enter into a written agreement with the other authority to co-ordinate requirements and avoid duplication.

LEGAL REQUIREMENTS

	Non-linear activities associated with energy generation and supply	Non-linear aspects of large scale property development	Non-linear aspects of social infrastructure development	Non-linear aspects of agri-industry	Linear Activities
Information disclosure					
What kind of information must be disclosed to the competent authority in terms of regulation 7 and what is protected by law?	All information that has the potential to influence the competent authority's decision must be disclosed on request unless the information is "protected by law". PAIA describes the types of information that are protected from disclosure, including personal information (Section 63), confidential commercial information (Sections 64 and 68), information subject to a confidentiality agreement (Section 65), information which if disclosed may endanger life or property (Section 66), information which is privileged from production in legal proceedings (Section 67) and research information (Section 69). PAIA does not protect records held by a private body if they contain evidence of substantial non-compliance with the law or an imminent and serious public safety or environmental risk and the public interest in disclosure outweighs the potential harm of disclosure (Section 70).	All information that has the potential to influence the decision of the competent authority must be disclosed on request unless the information is "protected by law". PAIA describes various types of information that are protected from disclosure, including personal information (Section 63), confidential commercial information (Sections 64 and 68), information subject to a confidentiality agreement (Section 65), information which if disclosed may endanger life or property (Section 66), information which is privileged from production in legal proceedings (Section 67) and research information (Section 69). PAIA does not protect records held by a private body if they contain evidence of substantial non-compliance with the law or an imminent and serious public safety or environmental risk and the public interest in disclosure outweighs the potential harm of disclosure (Section 70).	All information that has the potential to influence the decision of the competent authority must be disclosed on request unless the information is "protected by law". PAIA describes various types of information that are protected from disclosure, including personal information (Section 63), confidential commercial information (Sections 64 and 68), information subject to a confidentiality agreement (Section 65), information which if disclosed may endanger life or property (Section 66), information which is privileged from production in legal proceedings (Section 67) and research information (Section 69). PAIA does not protect records held by a private body if they contain evidence of substantial non-compliance with the law or an imminent and serious public safety or environmental risk and the public interest in disclosure outweighs the potential harm of disclosure (Section 70).	All information that has the potential to influence the decision of the competent authority must be disclosed on request unless the information is "protected by law". PAIA describes various types of information that are protected from disclosure, including personal information (Section 63), confidential commercial information (Sections 64 and 68), information subject to a confidentiality agreement (Section 65), information which if disclosed may endanger life or property (Section 66), information which is privileged from production in legal proceedings (Section 67) and research information (Section 69). PAIA does not protect records held by a private body if they contain evidence of substantial non-compliance with the law or an imminent and serious public safety or environmental risk and the public interest in disclosure outweighs the potential harm of disclosure (Section 70).	All information that has the potential to influence the decision of the competent authority must be disclosed on request unless the information is "protected by law". PAIA describes various types of information that are protected from disclosure, including personal information (Section 63), confidential commercial information (Sections 64 and 68), information subject to a confidentiality agreement (Section 65), information which if disclosed may endanger life or property (Section 66), information which is privileged from production in legal proceedings (Section 67) and research information (Section 69). PAIA does not protect records held by a private body if they contain evidence of substantial non-compliance with the law or an imminent and serious public safety or environmental risk and the public interest in disclosure outweighs the potential harm of disclosure (Section 70).
Assistance to applicants					
What kind of assistance can be obtained from competent authority?	Applicant may request the competent authority to identify any information and maps compiled in terms of Section 24(3) of NEMA (including environmental management framework) and any guidelines which the competent authority will take into account in making its decision (regulation 8(b)(ix)). The competent authority could refer the applicant to government policies regarding the preferred sources of energy generation.	Applicant may request the competent authority to identify any information and maps complied in terms of Section 24(3) of NEMA (including environmental management framework) and any guidelines which the competent authority will take into account in making its decision (regulation 8(b)(ix)). The competent authority could advise on what SDFs and other spatial plans exist for the area.	Applicant may request the competent authority to identify any information and maps complied in terms of Section 24(3) of NEMA (including environmental management framework) and any guidelines which the competent authority will take into account in making its decision (regulation 8(b)(ix)). The competent authority could refer the applicant to information such as the water reserve and the basic supply requirements.	Applicant may request the competent authority to identify any information and maps complied in terms of Section 24(3) of NEMA (including environmental management framework) and any guidelines which the competent authority will take into account in making its decision (regulation 8(b)(ix)). The competent authority could provide information on the requirements for the safe disposal of animal waste or the road transportation of livestock.	Applicant may request the competent authority to identify any information and maps complied in terms of Section 24(3) of NEMA (including environmental management framework) and any guidelines which the competent authority will take into account in making its decision (regulation 8(b)(ix)). Many linear activities will involve the state as applicant. In those circumstances there is a duty for organs of state to co-operate with one another so that the duty of the competent authority to assist the applicant would be matched by the duty of the applicant to cooperate with the competent authority.

LEGAL REQUIREMENTS					
	Non-linear activities associated with energy generation and supply	**Non-linear aspects of large scale property development**	**Non-linear aspects of social infrastructure development**	**Non-linear aspects of agri-industry**	**Linear Activities**
EAPs (regulation18(b))					
What particular skills and expertise should an EAP in this sector have?	The EAP should hold an environmental management qualification and have experience in conducting EIA processes. The EAP should also have a working knowledge of the energy sector.	The EAP should hold an environmental management qualification and have experience in conducting EIA processes. The EAP should have some knowledge of land use planning and SDFs.	The EAP should hold an environmental management qualification and have experience in conducting EIA processes. The EAP should have some knowledge of land use planning, SDFs and housing policy.	The EAP should hold an environmental management qualification and have experience in conducting EIA processes. The EAP should have some knowledge of land use planning and of the agricultural sector.	The EAP should hold an environmental management qualification and have experience in conducting EIA processes. The EAP must be able to deal with a number of parallel assessments for the same activity in different areas at the same time.
EAP must be independent	Yes	Yes	Yes	Yes	Yes
Determining the correct process					
Is it appropriate to make application for permission for scoping instead of basic assessment? (regulation 21(2)(b))	Yes, if basic assessment will not provide enough information.	Yes, if basic assessment will not provide enough information.	Yes, if basic assessment will not provide enough information.	Yes, if basic assessment will not provide enough information.	Yes, if basic assessment will not provide enough information.
Applicant not owner of land					
Consent needed if Applicant not the owner of the land	Yes. Need consent of land owner before applying.	Yes. Need consent of land owner before applying.	Yes. Need consent of land owner before applying.	Yes. Need consent of land owner before applying.	No. Consent is not needed however notice of the proposed activity must be given as soon as the route determination and/or alternatives routes are determined (regulation 16).

LEGAL REQUIREMENTS					
	Non-linear activities associated with energy generation and supply	Non-linear aspects of large scale property development	Non-linear aspects of social infrastructure development	Non-linear aspects of agri-industry	Linear Activities
BASIC ASSESSMENT REQUIREMENTS					
To which other competent authorities must notice be given?	Energy related activities will require notice to be given to Department of Mineral Resources, Department of Human Settlements, Department of Transport,Department of Environmental Affairs, Department of Water Affairs, Department of Science and Technology, the National Nuclear regulator and SAHRA.	Notice will need to be given to the municipal planning authorities, Department of Transport, Department of Environmental Affairs, Department of Water Affairs, Department of Human Settlements and SAHRA.	Notice will need to be given to the municipal planning authorities, Department of Human Settlements, Department of Transport, Department of Environmental Affairs, Department of Water Affairs and SAHRA.	Notice will need to be given to the municipal planning authorities, Department of Transport, Department of Environmental Affairs, Department of Water Affairs and SAHRA.	The organs of state that will probably need to be notified are the municipal planning authorities, the Department of Agriculture,Forestry and Fisheries, the Department of Transport, the Deparment of Mineral Resources, the Department of Water Affairs, Department of Environmental Affairs and heritage authorities.
What constitutes "all the information that is necessary for the competent authority to consider the application and to reach a decision" (reg 23(2)).	Applicant must provide information which may affect the decision on whether or not to grant environmental authorisation and if so, the conditions to be imposed, including information relevant to the criteria to be taken into account (listed in regulation 8). Whilst to some extent dependent on the project this would include information regarding the proposed locality and separation distances from neighbouring communities; information regarding whether the facility will constitute a Major Hazard Installation and regarding compliance with the Major Hazard Installation regulations under the Occupational Health and Safety Act. Energy efficiency should be considered. Air pollution and waste issues will be particularly relevant.	Applicant must provide information which may affect decision on whether or not to grant environmental authorisation and if so, the conditions to be imposed, including information relevant to the criteria to be taken into account (listed in regulation 8). To some extent dependent on project The views of the public and whether the location of the development is suitable for economic and social reasons as well as if measures can be taken to mitigate harm to the environment, will be especially relevant for consideration. Availability of services for the development and the impact of those services (ie water consumption) will be relevant.	Applicant must provide information which may affect decision on whether or not to grant environmental authorisation and if so, the conditions to be imposed, including information relevant to the criteria to be taken into account (listed in regulation 8). To some extent dependent on the type of project but the type and nature of services to be provided and their availability, as well as the planning demands of the area will be important.	Applicant must provide information which may affect decision on whether or not to grant environmental authorisation and if so, the conditions to be imposed, including information relevant to the criteria to be taken into account (listed in regulation 8). Depends on the scale and level of impact of the activity. Competing land uses and any possible health impacts and waste provisions may be relevant.	Applicant must provide information which may affect decision on whether or not to grant environmental authorisation and if so, the conditions to be imposed, including information relevant to the criteria to be taken into account (listed in regulation 8). To some extent depends on project but since linear activities do not necessarily significantly affect each part of the route, it may not be necessary to provide a lot of information other than that which is topographically or location specific. Where the project is a major road, the impact of creating a barrier for biodiversity should be considered.
Legislation that should be considered (reg 23(2)(e))	NEMA, NWA, National Environmental Management: Air Quality Act, National Nuclear Regulator Act, Nuclear Energy Act, Mineral and Petroleum Resources Development Act, Hazardous Substances Act, National Building Regulations and Building Standards Act, NHRA.	NEMA, NWA, Water Services Act, Conservation of Agricultural Resources Act, NHRA, National Environmental Management: Biodiversity Act, National Environmental Management: Waste Act, Physical Planning Act, DFA, National Roads Act and National Building Regulations & Building Standards Act.	NEMA, NWA, Water Services Act, Conservation of Agricultural Resources Act, NHRA, National Environmental Management: Biodiversity Act, National Environmental Management: Waste Act, Physical Planning Act, DFA, National Roads Act, National Building Regulations & Building Standards Act and Less Formal Townships Establishment Act.	NEMA, NWA, Water Services Act, Conservation of Agricultural Resources Act, NHRA, National Environmental Management: Biodiversity Act, National Environmental Management: Waste Act, Physical Planning Act, DFA, National Roads Act, National Building Regulations & Building Standards Act, Subdivision of Agricultural Land Act & National Environmental Management: Air Quality Act.	NEMA, NWA, National Environmental Management: Air Quality Act, National Nuclear Regulator Act, Nuclear Energy Act, Mineral and Petroleum Resources Development Act, Hazardous Substances Act, National Building Regulations and Building Standards Act, NHRA and Electricity Act.

LEGAL REQUIREMENTS					
	Non-linear activities associated with energy generation and supply	**Non-linear aspects of large scale property development**	**Non-linear aspects of social infrastructure development**	**Non-linear aspects of agri-industry**	**Linear Activities**
Need and desirability/advantages and disadvantages of the development (reg 23(2)(g))	Report should evaluate extent to which the proposed development is ecologically sustainable and promotes justifiable economic and social development (see Constitution Section 24) in order to assess desirability. The lack of sufficient energy in South Africa is accepted. Need would not be relevant but the desirability of a particular souce of energy and the nature of the technology used to produce the energy would need to be assessed.	Report should evaluate extent to which the proposed development is ecologically sustainable and promotes justifiable economic and social development (see Constitution Section 24) in order to assess desirability. It may be necessary to show that the need for large scale property development will enhance the facilities of the area and provide economic and social upliftment.	Report should evaluate extent to which the proposed development is ecologically sustainable and promotes justifiable economic and social development (see Constitution Section 24) in order to assess desirability. The backlog of social infrastructure development is generally accepted, therefore the desirability of the development in a particular location rather than the need for the development at all, will most likely require more consideration.	Report should evaluate extent to which the proposed development is ecologically sustainable and promotes justifiable economic and social development (see Constitution Section 24) in order to assess desirability. Need and desirability will relate to the level of food production/supply in the sector concerned.	Report should evaluate extent to which the proposed development is ecologically sustainable and promotes justifiable economic and social development (see Constitution Section 24) in order to assess desirability. Need for certain infrastructure can be straightforward but with toll roads and similar infrastructure, need should still be considered.
Description of significance and assessment of environmental impact (reg 23(2)(h))	The significance of impacts will be determined in the assessment process; most significant impacts are likely to include safety aspects of nuclear energy, the impact of air emissions from coal fired power stations, carbon emissions and other greenhouse gases. Cumulative impacts of dealing with nuclear waste or the impact on climate change from carbon emissions should be described.	The significance of impacts will be identified as part of the assessment process but the most significant impacts are likely to include land use management issues, impact on provision of services and biodiversity.	The significance of impacts will be identified as part of the assessment process but the most significant impacts are likely to include socio-economic impacts, land use management issues, impact on provision of services and biodiversity.	The significance of impacts will be identified as part of the assessment process but the most significant impacts are likely to include loss of agricultural land, pollution (including noise) and waste issues.	The significance of impacts will be identified as part of the assessment process but the most significant impacts are likely to include socio-economic impacts, visual impacts and biodiversity impacts.
What mitigation measures might be proposed (reg 23(2)(i))	To some extent this project dependent but in nuclear generation it will be important to mitigate the effects of production of nuclear waste, therefore methods of waste disposal must be considered. In coal-fired power stations air pollution and CO2 emissions are major issues - pollution abatement measures or alternative technologies should be considered. With regard to wind power plants there are high visual impacts as well as impacts on biodiversity (birds and bats) and danger to aircraft so that locational and technological aspects must be considered. Hydro-electric schemes will have visual impacts as well as major impacts on water resources, biodiversity and local communities.	Avoiding the creation of too many hardened areas around the properties would help stormwater control. Where there will be a loss of biodiversity and where ecosystems are destroyed for construction purposes, there may be an opportunity to offset this with rehabilitation elsewhere on the property. There should be visual impact mitigation, e.g. landscaping, urban design guidelines, public and non-motorised transport facilities to mitigate traffic impacts, measures to promote energy efficiency and efficient use of energy and water resources to minimise the impact on provision of basic services.	Roads and pipes may need to be routed around important geographical or heritage features.New developments have the opportunity to utilise solar power and so avoid excess demand on the power grid. There should be visual impact mitigation,e.g. landscaping, urban design guidelines, public transport facilities, green technology. Water and energy efficient measures should be put in place, utilising technology and best practice.	Mitigation measures should consider pollution abatement (including noise) and waste management. Water and energy efficient measures should be put in place, utilising technology and best practice.	Railways roads, power lines and pipes may need to be routed around important geographical or heritage features or threatened habitats or ecosystems.

LEGAL REQUIREMENTS					
	Non-linear activities associated with energy generation and supply	**Non-linear aspects of large scale property development**	**Non-linear aspects of social infrastructure development**	**Non-linear aspects of agri-industry**	**Linear Activities**
Specialist input: what is needed?	Specialist reports would be needed to help clarify the scientific claims of the different energy generating sources. Geotechnical, biodiversity, air pollution and climate change, waste management, traffic and socio-economic specialist studies should also be considered.	Geotechnical, biodiversity, air pollution and socio-economic specialist studies should be considered.	Geotechnical, biodiversity, air pollution and socio-economic specialist studies should be considered.	Biodiversity, air pollution, noise impact, waste managment and socio-economic specialist studies should be considered.	Land surveys and heritage/conservation studies may be needed. Route determinations are linked to the development of economic or residential hubs. Biodiversity sociio-economic and visual impact specialist studies are likely to be necessary.

LEGAL REQUIREMENTS					
	Non-linear activities associated with energy generation and supply	**Non-linear aspects of large scale property development**	**Non-linear aspects of social infrastructure development**	**Non-linear aspects of agri-industry**	**Linear Activities**
SCOPING AND EIA					
Scoping & EIR					
What constitutes "all the information that is necessary for a proper understanding of the nature of issues identified during scoping (reg 29(1))	Nuclear energy and coal fired plants should be located far from communities.Information regarding the proposed locality and health and safety and waste issues would be especially relevant.	The views of the public and whether the location of the development is suitable for economic and social reasons as well as if measures can be taken to mitigate harm to the environment, will be especially relevant for consideration.	The type and nature of services to be provided, as well as the planning demands of the area will be important.	Competing land uses and any possible health impacts and waste provisions may be relevant.	The nature of the services to be provided, as well as the topography and planning demands of the area will be important.
Description of property	This covers where the activity will take place, what the surrounding land uses are and what the geographical features are.	This covers where the activity will take place, what the surrounding land uses are and what the geographical features are.	This covers where the activity will take place, what the surrounding land uses are and what the geographical features are.	This covers where the activity will take place, what the surrounding land uses are and what the geographical features are.	This covers where the activity will take place, what the surrounding land uses are and what the geographical features are.
What are potential issues and impacts (reg 29(1)(f))?	The environmental issues and impacts would be related to resource use. In terms of cumulative impacts it would not be helpful to put a coal fired power station in an already polluted industrial area. Impacts of climate change mitigation objectives should be assessed.	The potential impacts relate to land use and long term economic viability as well as growing pressure on transport systems and municipal services.	The potential impacts relate to land use and growing pressure on transport systems and municipal services. Planning, economic, transport, urban design, visual impact and heritage specialist reports may be required.	Possibly there would be a greater demand on electrical supply in the area and agricultural land would be lost.	The routes of oil pipelines can be problematic as they may be placed underground and may leak in time causing harm to people and the environment.
What specialist input is needed?	As for basic assessment	As for basic assessment	As for basic assessment	As for basic assessment	As for basic assessment
Description of activity and any feasible and reasonable alternatives that have been identified (reg 29(1)(b))?	See discussion on alternatives (In terms of the General Process)	See discussion on alternatives (In terms of the General Process)	See discussion on alternatives (In terms of the General Process)	See discussion on alternatives (In terms of the General Process).	See discussion on alternatives (In terms of the General Process).
What should plan of study contain (reg 29(1)(i))?	The Plan of study must contain all the information necessary to understand the nature of the issues identified during scoping, including certain prescribed minimum requirements, as described in the section.	The Plan of study must contain all the information necessary to understand the nature of the issues identified during scoping, including certain prescribed minimum requirements, as described in the section.	The Plan of study must contain all the information necessary to understand the nature of the issues identified during scoping, including certain prescribed minimum requirements, as described in the section.	The Plan of study must contain all the information necessary to understand the nature of the issues identified during scoping, including certain prescribed minimum requirements, as described in the section.	The Plan of study must contain all the information necessary to understand the nature of the issues identified during scoping, including certain prescribed minimum requirements, as described in the section.
What guidelines are relevant to the activity? (reg 29(2))?	See guidelines contained in Section 4.3.3 of the Sector Guidelines for EIA Regulations.	See guidelines contained in Section 4.3.3. of the Sector Guidelines for EIA Regulations.	See guidelines contained in Section 4.3.3 of the Sector Guidelines for EIA Regulations.	See guidelines contained in Section 4.3.3 of the Sector Guidelines for EIA Regulations.	See guidelines contained in Section 4.3.3 of the Sector Guidelines for EIA Regulations.
What is the need/desirability and advantages and disadvantages of the activity?	As for basic assessment	As for basic assessment	As for basic assessment	As for basic assessment	As for basic assessment
What are the environmental issues common to the sector?	The major issues include energy efficiency, renewable sources, public safety, air pollution and carbon emissions.	The major issues include pressure on municipal services and access and transport routes.	The major issues include pressure on municipal services and access and transport routes and environmental justice issues.	The major issues include spatial planning, pollution and waste management.	The major issues include visual impacts, impacts on heritage and biodiversity.

LEGAL REQUIREMENTS

	Non-linear activities associated with energy generation and supply	Non-linear aspects of large scale property development	Non-linear aspects of social infrastructure development	Non-linear aspects of agri-industry	Linear Activities
Environmental Management Plan					
What key issues should the environmental management plan address:	**Example: Nuclear Power Generation** (Waste mangement facilities, water storage, safety and radiation issues, hazardous materials, emergency responses) and **Coal Power Generation** (Air pollution, climate change, strengths and weaknesses).	**Example: Development of a shopping centre or golf course estate** (Impact on biodiversity, landscape, ecological footprint, water quality, air quality, heritage, waste mangement, fuel spillage, emergency responses).	**Example: Development of low cost (RDP) housing, construction of a hospital or waste water treatment plant.** (Impact on bidiversity, waste management activities, landscape, ecological footprint, water and air quality, water and energy efficiency)	**Example: Construction of a dam or facility for slaughtering animals with a throughput of more than 10 000 kilograms per year** (waste management facilities, nature of water storage, water quality, water and energy efficiency)	**Example: Construction of a pipeline** (Emergency responses, impact on biodiversity, hazardous materials)
1. Pre-construction and construction activities	**Site Establishment and Site Infrastructure** Site handover; site and infrastructure (structures and accommodation, access roads, stockpile areas, batching plants, crusher plants, sand washing plants, nurseries, gates and fences) location, layout and design; site demarcation and access; site layout plan, site clearance; protection of natural and cultural resources, site services (water supply, sanitation, solid waste facilities, power supply, telecommunications, etc.); and storage.	**Site Establishment and Site Infrastructure** Site handover; site and infrastructure (structures and accommodation, access roads, stockpile areas, batching plants, crusher plants, sand washing plants, nurseries, gates and fences) location, layout and design; site demarcation and access; site layout plan, site clearance; protection of natural and cultural resources, site services (water supply, sanitation, solid waste facilities, power supply, telecommunications, etc.); and storage.	**Site Establishment and Site Infrastructure** Site handover; site and infrastructure (structures and accommodation, access roads, stockpile areas, batching plants, crusher plants, sand washing plants, nurseries, gates and fences) location, layout and design; site demarcation and access; site layout plan, site clearance; protection of natural and cultural resources, site services (water supply, sanitation, solid waste facilities, power supply, telecommunications, etc.); and storage.	**Site Establishment and Site Infrastructure** Site handover; site and infrastructure (structures and accommodation, access roads, stockpile areas, batching plants, crusher plants, sand washing plants, nurseries, gates and fences) location, layout and design; site demarcation and access; site layout plan, site clearance; protection of natural and cultural resources, site services (water supply, sanitation, solid waste facilities, power supply, telecommunications, etc.); and storage.	**Site establishment and site infrastructure** Site handover; site and infrastructure (structures and accommodation, access roads, stockpile areas, batching plants, crusher plants, sand washing plants, nurseries, gates and fences) location, layout and design; site demarcation and access; site layout plan, site clearance; protection of natural and cultural resources, site services (water supply, sanitation, solid waste facilities, power supply, telecommunications, etc.); and storage.
	Site Management during Construction Construction methods and programmes; demarcation of the construction areas, construction for water supply; cleanliness; site clearance and the disposal of material; topsoil removal, handling and conservation; tree cutting; preservation of flora and landscaping; alien plant control, cultural heritage resources; earthworks, plant and machinery (silencing, appropriate use, servicing, etc.); erosion control measures; pollution control measures (including air pollution); handling and disposal of hazardous substances; liquid and solid waste disposal; fire prevention and control; on-site quarrying activities; spoil sites; traffic management and control (dust, noise, visual, neighbour relations); disruptions to services (electricity, telecommunications, etc.); and blasting.	**Site Management during Construction** Construction methods and programmes; demarcation of the construction areas, construction for water supply; cleanliness; site clearance and the disposal of material; topsoil removal, handling and conservation; tree cutting; preservation of flora and landscaping; alien plant control, cultural heritage resources; earthworks, plant and machinery (silencing, appropriate use, servicing, etc.); erosion control measures; pollution control measures (including air pollution); handling and disposal of hazardous substances; liquid and solid waste disposal; fire prevention and control; on-site quarrying activities; spoil sites; traffic management and control (dust, noise, visual, neighbour relations); disruptions to services (electricity, telecommunications, etc.); and blasting.	**Site Management during Construction** Construction methods and programmes; demarcation of the construction areas, construction for water supply; cleanliness; site clearance and the disposal of material; topsoil removal, handling and conservation; tree cutting; preservation of flora and landscaping; alien plant control, cultural heritage resources; earthworks, plant and machinery (silencing, appropriate use, servicing, etc.); erosion control measures; pollution control measures (including air pollution); handling and disposal of hazardous substances; liquid and solid waste disposal; fire prevention and control; on-site quarrying activities; spoil sites; traffic management and control (dust, noise, visual, neighbour relations); disruptions to services (electricity, telecommunications, etc.); and blasting.	**Site Management during Construction** Construction methods and programmes; demarcation of the construction areas, construction for water supply; cleanliness; site clearance and the disposal of material; topsoil removal, handling and conservation; tree cutting; preservation of flora and landscaping; alien plant control, cultural heritage resources; earthworks, plant and machinery (silencing, appropriate use, servicing, etc.); erosion control measures; pollution control measures (including air pollution); handling and disposal of hazardous substances; liquid and solid waste disposal; fire prevention and control; on-site quarrying activities; spoil sites; traffic management and control (dust, noise, visual, neighbour relations); disruptions to services (electricity, telecommunications, etc.); and blasting.	**Site Management during Construction** Construction methods and programmes; demarcation of the construction areas, construction for water supply; cleanliness; site clearance and the disposal of material; topsoil removal, handling and conservation; tree cutting; preservation of flora and landscaping; alien plant control, cultural heritage resources; earthworks, plant and machinery (silencing, appropriate use, servicing, etc.); erosion control measures; pollution control measures (including air pollution); handling and disposal of hazardous substances; liquid and solid waste disposal; fire prevention and control; on-site quarrying activities; spoil sites; traffic management and control (dust, noise, visual, neighbour relations); disruptions to services (electricity, telecommunications, etc.); and blasting.

LEGAL REQUIREMENTS

	Non-linear activities associated with energy generation and supply	Non-linear aspects of large scale property development	Non-linear aspects of social infrastructure development	Non-linear aspects of agri-industry	Linear Activities
2. Operation or undertaking of activities	**Registers** Hazardous substances, emergency procedures, environmental incidents, dealing with public complaints and environmental induction and training. **Reporting Requirements** Lists all required reports and their frequency of production. Also details the environmental requirements for the site diary. **Public Communication** Specifies channels of communication with the public and the frequency of such communication.	**Registers** Hazardous substances, emergency procedures, environmental incidents, dealing with public complaints and environmental induction and training. **Reporting Requirements** Lists all required reports and their frequency of production. Also details the environmental requirements for the site diary. **Public Communication** Specifies channels of communication with the public and the frequency of such communication.	**Registers** Hazardous substances, emergency procedures, environmental incidents, dealing with public complaints and environmental induction and training. **Reporting Requirements** Lists all required reports and their frequency of production. Also details the environmental requirements for the site diary. **Public Communication** Specifies channels of communication with the public and the frequency of such communication.	**Registers** Hazardous substances, emergency procedures, environmental incidents, dealing with public complaints and environmental induction and training. **Reporting Requirements** Lists all required reports and their frequency of production. Also details the environmental requirements for the site diary. **Public Communication** Specifies channels of communication with the public and the frequency of such communication.	**Registers** Hazardous substances, emergency procedures, environmental incidents, dealing with public complaints and environmental induction and training. **Reporting Requirements** Lists all required reports and their frequency of production. Also details the environmental requirements for the site diary. **Public Communication** Specifies channels of communication with the public and the frequency of such communication.
3. Rehabilitation of the environment	**Reinstatement and Rehabilitation** Removal and disposal of structures; infrastructure; waste; rubble; pollutants; shaping; topsoil replacement; ripping, scarifying and re-vegetation; and contract completion.	**Reinstatement and Rehabilitation** Removal and disposal of structures; infrastructure; waste; rubble; pollutants; shaping; topsoil replacement; ripping, scarifying and re-vegetation; and contract completion.	**Reinstatement and Rehabilitation** Removal and disposal of structures; infrastructure; waste; rubble; pollutants; shaping; topsoil replacement; ripping, scarifying and re-vegetation; and contract completion.	**Reinstatement and Rehabilitation** Removal and disposal of structures; infrastructure; waste; rubble; pollutants; shaping; topsoil replacement; ripping, scarifying and re-vegetation; and contract completion.	**Reinstatement and Rehabilitation** Removal and disposal of structures; infrastructure; waste; rubble; pollutants; shaping; topsoil replacement; ripping, scarifying and re-vegetation; and contract completion.
4. Issues relating to closure	Post closure monitoring which may include, testing of soil and groundwater for contamination. The stableness of the ground could also be monitored to minimise possible large scale erosion and mud slides during the rainy season.	Post closure monitoring which may include, testing of soil and groundwater for contamination. The stableness of the ground could also be monitored to minimise possible large scale erosion and mud slides during the rainy season.	Post closure monitoring which may include, testing of soil and groundwater for contamination. The stableness of the ground could also be monitored to minimise possible large scale erosion and mud slides during the rainy season.	Post closure monitoring which may include, testing of soil and groundwater for contamination. The stableness of the ground could also be monitored to minimise possible large scale erosion and mud slides during the rainy season.	Post closure monitoring which may include, testing of soil and groundwater for contamination. The stableness of the ground could also be monitored to minimise possible large scale erosion and mud slides during the rainy season.
Who should implement the EMP?	The person or organisation proposing a project or activity may be described as the Project Proponent. Ultimately, the Project Proponent is responsible for the development and implementation of the EMP and, where relevant, ensuring that the conditions of environmental authorisation are satisfied. It may be appropriate for responsibility for the EMP to pass to the operator of the facility once it is fully operational.	The person or organisation proposing a project or activity may be described as the Project Proponent. Ultimately, the Project Proponent is responsible for the development and implementation of the EMP and, where relevant, ensuring that the conditions in the environmental authorisation are satisfied. It may be appropriate for responsibility for the EMP to ultimately pass to a home owners association in housing developments.	The person or organisation proposing a project or activity may be described as the Project Proponent. Ultimately, the Project Proponent is responsible for the development and implementation of the EMP and, where relevant, ensuring that the conditions in the environmental authorisation are satisfied. It may be appropriate for responsibility for the EMP to ultimately pass to a home owners association in housing developments.	The person or organisation proposing a project or activity may be described as the Project Proponent. Ultimately, the Project Proponent is responsible for the development and implementation of the EMP and, where relevant, ensuring that the conditions in the environmental authorisation are satisfied.	A person must be appointed to implement the EMP requirements. For the construction phase, this person is usually appointed by the Contractor.
Mechanisms for monitoring compliance	Auditing (internal and external) and reporting thereon. Where necessary taking remedial action to comply.	Auditing (internal and external) and reporting thereon. Where necessary taking remedial action to comply.	Auditing (internal and external) and reporting thereon. Where necessary taking remedial action to comply.	Auditing (internal and external) and reporting thereon. Where necessary taking remedial action to comply.	Auditing (internal and external) and reporting thereon. Where necessary taking remedial action to comply.

LEGAL REQUIREMENTS					
	Non-linear activities associated with energy generation and supply	Non-linear aspects of large scale property development	Non-linear aspects of social infrastructure development	Non-linear aspects of agri-industry	Linear Activities
NON-EXHAUSTIVE LISTED ACTIVITIES					
GN R546					
Relevant definitions	"dangerous goods": means goods capable of posing a significant risk to the health and safety of people or the environment and which are listed in SANS 10228.	"infill development": means urban development, including residential, commercial, retail, institutional, educational and mixed use development, but excluding industrial development, in a built up area which is at least 50% abutted by urban development and which can be readily connected to municipal bulk infrastructure services.	"infill development": means urban development, including residential, commercial, retail, institutional, educational and mixed use development, but excluding industrial development, in a built up area which is at least 50% abutted by urban development and which can be readily connected to municipal bulk infrastructure services.	agri -industrial: means an undertaking involving the production, processing, manufacture, packaging or storage of agricultural produce and includes battery farm operations that are under roof.	"petroleum:" means any liquid, solid hydrocarbon or combustible gas as defined in Section 1 of the Mineral and Petroleum Resources Development Act.
		"phased development": an activity that is developed in phases over time on the same or adjacent properties to create a single or linked entity through interconnected internal vehicular or pedestrian circulation, sharing of infrastructure, or the continuum of design, style or concept by the same proponent or his or her successors	"phased development": an activity that is developed in phases over time on the same or adjacent properties to create a single or linked entity through interconnected internal vehicular or pedestrian circulation, sharing of infrastructure, or the continuum of design, style or concept by the same proponent or his or her successors		
Which listed activities are potentially relevant	1(a) if generation is between 10 and 20 megawatts	1 (d) resorts, lodges, hotels or other toursim and hospitatlity facilities in protected areas	1(e) if sports facilities	1(g) if involving slaughter of animals (10 000 kilograms or more per year.)	
	1(l) if transmission and distribution of electricity above ground (between 33 and 120 kilovolts)	12 The transformation or removal of indigneous vegetation	1 (f) sports spectator facilities	1(h) if concentration of animals as prescribed	
	7 if above ground storage of dangerous good	13 if abstraction of groundwater exceeding general authorisation	1(k) if bulk transportation of sewage or water	1(i) if mariculture or aquaculture	
	23(a),(b) (c) if decommissioning	15 if construction of road wider than 4m or with reserve wider than 6m	1(n) if off-stream storage of water	1(j) if outside current industrial zoning and more than 1000 m2	
	24(a), (b) (c) if recommissioning	17 Phased activities	10 the establishment of cemeteries	13 if abstraction of groundwater exceeding general authorisation	
	25 if expansion or changes to facilities requiring permit amendment	18 if subdivision of land	11 if decommissioning a dam	19 if manufacturing, warehousing, bottling, packaging or storate facility outside industrial zone and more than 1000 square metres	
		19 if manufacturing, warehousing, bottling, packaging or storate facility outside industrial zone and more than 1000 square metres	12 The transformation or removal of indigneous vegetation	21 if involving release of genetically modified organisms	
		20 The transformation of an area zoned for use as public open space or for conservation purpose to another use.	13 if abstraction of groundwater exceeding general authorisation	22 if involving release of biological pest control organism	
		23(c) if decommissioning and the land is contaminated	15 if construction of road wider than 4m or with reserve wider than 6m	23(c) if decommissioning and the land is contaminated	

LEGAL REQUIREMENTS					
	Non-linear activities associated with energy generation and supply	Non-linear aspects of large scale property development	Non-linear aspects of social infrastructure development	Non-linear aspects of agri-industry	Linear Activities
		25 if expansion or changes to facilities requiring permit amendment	17 Phased activities	24 (c) if recommissioning	

LEGAL REQUIREMENTS					
	Non-linear activities associated with energy generation and supply	**Non-linear aspects of large scale property development**	**Non-linear aspects of social infrastructure development**	**Non-linear aspects of agri-industry**	**Linear Activities**
			18 if subdivision of land	25 if expansion or changes to facilities requiring permit amendment	
			20 The transformation of an area zoned for use as public open space or for conservation purpose to another use.		
			23(c), (d), (e) (f) (g) if decommissioning and land is contaminated		
			24 if recommissioning		
			25 if expansion or changes to facilities requiring permit amendment		
Consider phased activities (Activity 17)		17 likely if development is phased			
Consider location-related listed activities: near river or stream (within 100m of highwater mark on a floodplain, wetland, lagoon, lake or in-stream dam); in a listed ecosystem or on land zoned public open space or for conservation	Nuclear facilities likely to involve activities within 100m of highwater mark			Aquaculture likely to involve activities within 100m of the highwater mark	Location based activities must be considered as it is likely that a road, railway, pipeline or cable will cross or impact on land which meets one or more of these criteria
GNR 387					
	1(a) if generation of more than 20 megawatts covering an area in excess of 1 ha	5 if involving major road	Extraction of gas from landfill		
	1(b) if nuclear reaction		1(n) if transfer of water between catchments or impoundments		
	1 (c) if involving above ground storage of dangerous good		1(s) if construction of railway line		
	1(l) if transmission and distribution of electricity above ground 120 kilovolts or more		1(t) if sports facilities		
			6 if construction of dam		
Consider scale of development: more than 20 ha (activity 2)		Likely to be more than 20ha			Likely to be more than 20ha
Consider location: within 100m of highwater mark (activity 9) listed ecosystem (activity 10)	Nuclear facilities likely to involve activities within 100m of highwater mark			Aquaculture likely to involve activities within 100m of highwater mark	Location based activities must be considered as it is likely that a road, railway, pipeline or cable will cross or impact on land which meets one or more of these criteria

	ANNEX B: CHECKLIST OF QUESTIONS TO ASSIST SCOPING OF ISSUES, POTENTIAL IMPACTS AND SPECIALIST INPUT NEEDED								
	EMISSIONS QUESTIONS	YES	NO	DON'T KNOW	NOT RELEVANT	SPECIALIST INPUT		INFORMATION SOURCES	COMMENTS
						Yes	No		
1	Will there be point source emissions to atmosphere?								
2	Will there be any constituents in air emissions that are known to be harmful to human health?								
3	Will fugitive emissions be produced at a significant level?								
4	Will the project result in GHGs?								
5	Will the project produce effluent?								
6	Will effluent contain any toxic, harmful or hazardous substances?								
7	Will effluent be discharged to a water course or water body?								
8	Will effluent be discharged to the municipal sewer?								
9	Will hazardous waste be produced?								
10	Will medical or bio-hazardous waste be produced?								
11	Will domestic waste be produced?								
12	Will non-hazardous / general waste be produced?								
13	Will garden waste be produced?								
14	Will business waste be produced (as defined in the National Environmental Management Waste Act 59 of 2008)?								
15	Will building waste be produced?								
16	Will demolition waste be produced?								
17	Will general industrial waste be produced?								
18	Will Section 14 (declared in terms of the National Environmental Management Waste Act 59 of 2008) be produced?								
19	Will the project generate noise?								
20	Will the project generate traffic?								
21	Will the project require the regular use of heavy vehicles?								

	ANNEX B: CHECKLIST OF QUESTIONS TO ASSIST SCOPING OF ISSUES, POTENTIAL IMPACTS AND SPECIALIST INPUT NEEDED								
	PROJECT PLANNING AND DESIGN CONSIDERATIONS	YES	NO	DON'T KNOW	NOT RELEVANT	SPECIALIST INPUT NEEDED		INFORMATION SOURCES	COMMENTS
						Yes	No		
1	Does the project include water conservation design measures or technology?								
2	Will rainwater collection or harvesting take place?								
3	Will grey water recycling be implemented?								
4	Does the project include energy conservation design measures or technology?								
5	If the project will produce point source emissions, will technology be fitted to treat, remove or reduce any harmful elements?								
6	If the project will produce non-point source emissions, will technology be fitted to treat, remove, contain or reduce any harmful elements?								
7	Will measures be taken to control fugitive emissions, especially VOCs?								
8	Has consideration been given to minimising GHGs (Green House Gas emissions)?								
9	Has consideration been given to minimising the carbon footprint of the project?								
10	Will measures be taken to reduce emissions and waste at source?								
11	Will waste recycling be undertaken?								
12	Will hazardous / dangerous goods storage areas be designed according to environmental best practice?								
13	If a waste storage area is to be provided, will this be designed in accordance with environmental best practice?								
14	If hazardous waste has been generated, will there be any treatment facilities on site to reduce the hazard level?								
15	If hazardous waste has been generated, will there be any facilities on site to facilitate the re-use or recycling of such waste?								
16	If there is hazardous waste that requires disposal has an appropriately licensed facility confirmed that it will accept the waste?								

	ANNEX B: CHECKLIST OF QUESTIONS TO ASSIST SCOPING OF ISSUES, POTENTIAL IMPACTS AND SPECIALIST INPUT NEEDED								
	PROJECT PLANNING AND DESIGN CONSIDERATIONS	YES	NO	DON'T KNOW	NOT RELEVANT	SPECIALIST INPUT NEEDED		INFORMATION SOURCES	COMMENTS
						Yes	No		
17	If industrial effluent is to be discharged to a water course, will its quality comply with the General Standard as a minimum?								
18	If industrial effluent is produced will it be treated on site to remove harmful constituents (e.g. heavy metals, organic pollutants?)								
19	If there is to be on-site sewage treatment has consideration been given to recycling of the resulting effluent?								
20	If there is to be on-site sewage treatment or landfilling of waste has consideration been given to energy generation opportunities?								
21	Will treatment of industrial water take place so that this water can be re-used in the industrial process?								
22	Will cleaner technology inform the design of the project?								
23	Will environmental factors inform the choice of technology?								
24	Will all storage areas for chemicals and fuels provide be contained as per the accepted standards (e.g. SANS standards)?								
25	Will building materials from renewable sources be used?								
26	If renewable building materials are to be used, will these come from sustainably harvested or produced sources?								
27	Will buildings be designed in accordance with "green building" standards?								
28	Will any recycled building materials be used?								
29	Will organic gardening / landscaping methods be employed?								
30	Will only locally indigenous species be used in landscaped areas / gardens?								

	Annex C	Resource use																										
	Activities and Impacts Matrix: Linear Development	Land type						Water source						Raw Materials								Energy source					Soil		
	Use of natural resources Use of communal/public resources	Agricultural	Undeveloped - rural	Undeveloped - urban	Developed - urban	Communal	Public / state land	Sea water	Groundwater	River or stream	Wetland	Dam	Water Board/ Water Services Provides / Municipal	Chemicals - non hazardous	Hazardous chemical substances	Fuel - gas	Recycled concrete and rubble	Cement	Bituman	Fuel - petrol, diesel	Coal	Electricity	Liquid Fuel - HFO, diesel, paraffin, petrol	Coal	Gas - LPG	Renewable - wind, solar	Topsoil	Rock material	Fill material / rubble
	LISTING NOTICE 1																											
	Transport infrastructure																											
1	The construction of facilities or infrastructure, including associated structures or infrastructure, for:																											
(q)	the landing, parking and maintenance of aircraft including - - helicopter landing pads, excluding helicopter landing facilities and stops used exclusively by emergency services; - unpaved aircraft landing strips shorter than 1,4km - structures for equipment and aircraft storage - structures for maintenance and repair - structures for fuelling and fuel storage - structures for air cargo handling																											
(u)	above ground cableways and funiculars;																											
15	The construction of a road that is wider than 4 metres or that has a reserve wider than 6 metres, excluding roads that fall within the ambit of another listed activity or which are access roads of less than 30 metres long.																											
	Sewage and water infrastructure																											
1	The construction of facilities or infrastructure, including associated structures or infrastructure, for:																											
(k)	the bulk transportation of sewage and water, including storm water, in pipelines with - - an internal diameter of 0,36 metres or more - a peak throughput of 120 litres per second or more;																											
	Powerlines																											
(l)	the transmission and distribution of electricity above ground with a capacity of more than 33 kilovolts and less than 120 kilovolts;																											

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	Activities and Impacts Matrix: Linear Development	Land type						Water source						Raw Materials								Energy source					Soil		
	Use of natural resources Use of communal/public resources	Agricultural	Undeveloped - rural	Undeveloped - urban	Developed - urban	Communal	Public / state land	Sea water	Groundwater	River or stream	Wetland	Dam	Water Board/ Water Services Provides / Municipal	Chemicals - non hazardous	Hazardous chemical substances	Fuel - gas	Recycled concrete and rubble	Cement	Bitumen	Fuel - petrol, diesel	Coal	Electricity	Liquid Fuel - HFO, diesel, paraffin, petrol	Coal	Gas - LPG	Renewable - wind, solar	Topsoil	Rock material	Fill material / rubble
	LISTING NOTICE 2																											
	Transport infrastructure																											
1	The construction of facilities or infrastructure, including associated structures or infrastructure, for:																											
(j)	the bulk transportation of dangerous goods using pipelines, funiculars or conveyors with a throughput capacity of 50 tons or 50 cubic metres or more per day																											
(k)	the landing, parking and maintenance of aircraft, excluding unpaved landing strips shorter than 1,4 kilometres in length, but including - airports; - runways; - waterways; - structures for engine testing																											
(s)	rail transportation, excluding railway lines and sidings in industrial areas and underground railway lines in mines, but including: - railway lines - stations - shunting yards.																											
5	The route determination of roads and design of associated physical infrastructure, including roads that have not yet been built for which routes have been determined before the publication of this notice and which has not been authorised by a competent authority in terms of the EIA Regulations, 2006 made under section 24(5) of the Act and published in GNR. 385 of 2006, where: - it is a national road as defined in section 40 of the South African National Roads Agency Limited and National Roads Act, 1998 (Act No. 7 of 1998) - it is a road administered by a provincial authority - the road reserve is wider than 30 metres - the road will cater for more than one lane of traffic in both directions																											

	Annex C	Location																																														
	Activities and Impacts Matrix: Linear Devlopments	**Physical**										**Biodiversity**									**Heritage**					**Aesthetics**				**Social**						**Land use**												
	Locational considerations relevant to development footprint **Locational considerations relevant to compatibility of development with surroundings**	Geological features	Productive soils (Agricultural, Forestry)	Slope	Erodable and unstable soils	Clay soils	Rock and rock layers	Groundwater / exploitable aquifer	Surface water resources (river, stream, wetland, dam)	Microclimate	Floodplain	Unique habitats	Marine/coastal systems	Freshwater systems	Ecological corridor	Critical Biodiversity Area	Red Data species	Endemic species	CE, E or V ecosystems as defined in the NSBA	Intact, pristine or near-pristine indigenous vegetation	Archaeology/paleontology	Cultural landscapes / sites	Scientific Value	Historical buildings / sites	Socail Memory	Scenic/rural landscapes	Unique architecture	Significant townscapes/streetscapes/precinct	Scenic routes	Local community - informal settlement	Local community - formal settlement	Community facilities	Public / community access routes	Public Open Space	Communal facilities/areas	Agricultural	Forestry	Previously mined	Infrastructure	Mixed use	Commercial	Residential	Industrial	Public facility / POS	Declared Nature conservation area / protected area	Urban conservation area	Brownfields (previously developed)	Undeveloped
	LISTING NOTICE 1																																															
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	Activities and Impacts Matrix: Linear Devlopments	**Physical**										**Biodiversity**									**Heritage**					**Aesthetics**				**Social**						**Land use**												
	Locational considerations relevant to development footprint **Locational considerations relevant to compatibility of development with surroundings**	Geological features	Productive soils (Agricultural, Forestry)	Slope	Erodable and unstable soils	Clay soils	Rock and rock layers	Groundwater / exploitable aquifer	Surface water resources (river, stream, wetland, dam)	Microclimate	Floodplain	Unique habitats	Marine/coastal systems	Freshwater systems	Ecological corridor	Critical Biodiversity Area	Red Data species	Endemic species	CE, E or V ecosystems as defined in the NSBA	Intact, pristine or near-pristine indigenous vegetation	Archaeology/paleoentology	Cultural landscapes / sites	Scientific Value	Historical buildings / sites	Socail Memory	Scenic/rural landscapes	Unique architecture	Significant townscapes/streetscapes/precinct	Scenic routes	Local community - informal settlement	Local community - formal settlement	Community facilities	Public / community access routes	Public Open Space	Communal facilities/areas	Agricultural	Forestry	Previously mined	Infrastructure	Mixed use	Commercial	Residential	Industrial	Public facility / POS	Declared Nature conservation area / protected area	Urban conservation area	Brownfields (previously developed)	Undeveloped
(s)	rail transportation, excluding railway lines and sidings in industrial areas and underground railway lines in mines, but including: - railway lines - stations - shunting yards.																																															
5	The route determination of roads and design of associated physical infrastructure, including roads that have not yet been built for which routes have been determined before the publication of this notice and which have not been authorised by a competent authority in terms of the EIA Regulations made under section 24(5) of the Act and published in GNR. 385 of 2006, where: - it is a national road as defined in section 40 of the South African National Roads Agency Limited and National Roads Act 7 of 1998 - it is a road administered by a provincial authority - the road reserve is wider than 30 metres - the road will cater for more than one lane of traffic in both directions																																															

	Annex C	Emissions																													
	Activities and Impacts Matrix: Linear Development	Air										Effluent						Waste								Noise				Runoff			
	Releases to air, soil/land and water	Point source		Dust		Odours		Non-point source / Fugitive		Radioactive emissions		Domestic		Industrial - containing organics		Industrial - containing inorganics		Domestic waste		Construction waste		General		Hazardous		Continuous noise		Intermittent noise		Contaminated stormwater		Clean runoff	
		Construction	Operation	Construction	Operation	Construction	Operation	Construction	Operation	Construction	Operation	Construction	Operation	Construction	Operation	Construction	Operation	Construction	Operation	Construction	Operation	Construction	Operation	Construction	Operation	Construction	Operation	Construction	Operation	Construction	Operation	Construction	Operation
	LISTING NOTICE 1																																
	Transport infrastructure																																
1	The construction of facilities or infrastructure, including associated structures or infrastructure, for:																																
(q)	the landing, parking and maintenance of aircraft including - - helicopter landing pads, excluding helicopter landing facilities and stops used exclusively by emergency services; - unpaved aircraft landing strips shorter than 1,4km - structures for equipment and aircraft storage - structures for maintenance and repair - structures for fuelling and fuel storage - structures for air cargo handling																																
(u)	above ground cableways and funiculars;																																
15	The construction of a road that is wider than 4 metres or that has a reserve wider than 6 metres, excluding roads that fall within the ambit of another listed activity or which are access roads of less than 30 metres long.																																
	Sewage and water infrastructure																																
1	The construction of facilities or infrastructure, including associated structures or infrastructure, for –																																
(k)	the bulk transportation of sewage and water, including storm water, in pipelines with - - an internal diameter of 0,36 metres or more - a peak throughput of 120 litres per second or more;																																
	Powerlines																																
(l)	the transmission and distribution of electricity above ground with a capacity of more than 33 kilovolts and less than 120 kilovolts;																																

	Annex C	Emissions																									
	Activities and Impacts Matrix: Linear Development	Air					Effluent			Waste				Noise		Runoff	
	Releases to air, soil/land and water	Point source	Dust	Odours	Non-point source / Fugitive	Radioactive emissions	Domestic	Industrial - containing organics	Industrial - containing inorganics	Domestic waste	Construction waste	General	Hazardous	Continuous noise	Intermittent noise	Contaminated stormwater	Clean runoff
	LISTING NOTICE 2																
	Transport Infrastructure																
1	The construction of facilities or infrastructure, including associated structures or infrastructure, for –																
(j)	the bulk transportation of dangerous goods using pipelines, funiculars or conveyors with a throughput capacity of 50 tons or 50 cubic metres or more per day																
(k)	the landing, parking and maintenance of aircraft, excluding unpaved landing strips shorter than 1,4 kilometres in length, but including - airports; - runways; - waterways; - structures for engine testing																
(s)	rail transportation, excluding railway lines and sidings in industrial areas and underground railway lines in mines, but including: - railway lines - stations - shunting yards.																
5	The route determination of roads and design of associated physical infrastructure, including roads that have not yet been built for which routes have been determined before the publication of this notice and which has not been authorised by a competent authority in terms of the EIA Regulations, 2006 made under section 24(5) of the Act and published in GNR. 385 of 2006, where: - it is a national road as defined in section 40 of the South African National Roads Agency Limited and National Roads Act, 1998 (Act No. 7 of 1998) - it is a road administered by a provincial authority - the road reserve is wider than 30 metres - the road will cater for more than one lane of traffic in both directions																

	Annex D	Location																																													
	Activities and Impacts Matrix: Agri-industry	**Physical**										**Biodiversity**									**Heritage**					**Aesthetics**				**Social**						**Land use**												
	Locational considerations relevant to development footprint **Locational considerations relevant to compatibility of development with surroundings**	Geological features	Productive soils (Agricultural, Forestry)	Slope	Erodable and unstable soils	Clay soils	Rock and rock layers	Groundwater / exploitable aquifer	Surface water resources (river, stream, wetland, dam)	Microclimate	Floodplain	Unique habitats	Marine/coastal systems	Freshwater systems	Ecological corridor	Critical Biodiversity Area	Red Data species	Endemic species	CE, E or V ecosystems as defined in the NSBA	Intact, pristine or near-pristine indigenous vegetation	Archaeology/paleontology	Cultural landscapes / sites	Scientific Value	Historical buildings / sites	Socail Memory	Scenic/rural landscapes	Unique architecture	Significant townscapes/streetscapes/precinct	Scenic routes	Local community - informal settlement	Local community - formal settlement	Community facilities	Public / community access routes	Public Open Space	Communal facilities/areas	Agricultural	Forestry	Previously mined	Infrastructure	Mixed use	Commercial	Residential	Industrial	Public facility / POS	Declared Nature conservation area / protected area	Urban conservation area	Brownfields (previously developed)	Undeveloped
	LISTING NOTICE 1																																															
1	The construction of facilities or infrastructure, including associated structures or infrastructure, for:																																															
(f)	the slaughter of animals with a product throughput of 10 000 kilograms or more per year;																																															
(h)	the concentration of animals for the purpose of commercial production in densities that exceed:																																															
	- 20 square metres per head of cattle and more than 500 head of cattle per facility per year; - 8 square meters per sheep and more than 1 000 sheep per facility per year; - 8 square metres per pig and more than 250 pigs per facility per year excluding piglets that are not yet weaned; - 30 square metres per crocodile at any level of production, excluding crocodiles younger than 6 months; - 3 square metres per head of poultry and more than 250 poultry per facility at any time, excluding chicks younger than 20 days; - 3 square metre per rabbit at and more than 250 rabbits per facility at any time; - 100 square metres per ostrich and more than 50 ostriches per facility per year or 2500 square metres per breeding pair																																															

	Annex D	Location																																														
	Activities and Impacts Matrix: Agri-industry	Physical										Biodiversity									Heritage					Aesthetics				Social						Land use												
	Locational considerations relevant to development footprint **Locational considerations relevant to compatibility of development with surroundings**	Geological features	Productive soils (Agricultural, Forestry)	Slope	Erodable and unstable soils	Clay soils	Rock and rock layers	Groundwater / exploitable aquifer	Surface water resources (river, stream, wetland, dam)	Microclimate	Floodplain	Unique habitats	Marine/coastal systems	Freshwater systems	Ecological corridor	Critical Biodiversity Area	Red Data species	Endemic species	CE, E or V ecosystems as defined in the NSBA	Intact, pristine or near-pristine indigenous vegetation	Archaeology/paleontology	Cultural landscapes / sites	Scientific Value	Historical buildings / sites	Socail Memory	Scenic/rural landscapes	Unique architecture	Significant townscapes/streetscapes/precinct	Scenic routes	Local community - informal settlement	Local community - formal settlement	Community facilities	Public / community access routes	Public Open Space	Communal facilities/areas	Agricultural	Forestry	Previously mined	Infrastructure	Mixed use	Commercial	Residential	Industrial	Public facility / POS	Declared Nature conservation area / protected area	Urban conservation area	Brownfields (previously developed)	Undeveloped
(i)	aquaculture production, including mariculture and algae farms, with a product throughput of 10 000 kilograms or more per year;																																															
(j)	agri-industrial purposes, outside areas with an existing land use zoning for industrial purposes, that cover an area of 1 000 square metres or more;																																															
	Decommissioning of industrial activities																																															
23	Decommissioning of existing facilities or infrastructure, other than facilities or infrastructure that commenced under an environmental authorisation issued in terms of the EIA Regulations, 2006 made under section 24(5) of the Act and published in GNR 385 of 2006, for:																																															
(c)	industrial activities where the facility or the land on which it is located is contaminated or has the potential to be contaminated by any material which may place a restriction on the potential to re-use the site for a different purpose;																																															
	Recommissioning of industrial activities																																															
24	Recommissioning of existing facilities or infrastructure, other than facilities or infrastructure that commenced under an environmental authorisation issued in terms of the EIA Regulations, 2006 made under section 24(5) of of the Act and published in GNR 385 of 2006, after a period of two years from closure or temporary closure, for:																																															
(c)	facilities for any process or activity, which require permission, authorisation, or further authorisation, in terms of legislation governing the release of emissions, pollution, effluent or waste prior to the facility being recommissioned.																																															

	Annex D	Location																																														
	Activities and Impacts Matrix: Agri-industry	**Physical**										**Biodiversity**									**Heritage**					**Aesthetics**				**Social**						**Land use**												
	Locational considerations relevant to development footprint **Locational considerations relevant to compatibility of development with surroundings**	Geological features	Productive soils (Agricultural, Forestry)	Slope	Erodable and unstable soils	Clay soils	Rock and rock layers	Groundwater / exploitable aquifer	Surface water resources (river, stream, wetland, dam)	Microclimate	Floodplain	Unique habitats	Marine/coastal systems	Freshwater systems	Ecological corridor	Critical Biodiversity Area	Red Data species	Endemic species	CE, E or V ecosystems as defined in the NSBA	Intact, pristine or near-pristine indigenous vegetation	Archaeology/paleontology	Cultural landscapes / sites	Scientific Value	Historical buildings / sites	Socail Memory	Scenic/rural landscapes	Unique architecture	Significant townscapes/streetscapes/precinct	Scenic routes	Local community - informal settlement	Local community - formal settlement	Community facilities	Public / community access routes	Public Open Space	Communal facilities/areas	Agricultural	Forestry	Previously mined	Infrastructure	Mixed use	Commercial	Residential	Industrial	Public facility / POS	Declared Nature conservation area / protected area	Urban conservation area	Brownfields (previously developed)	Undeveloped
	Environmental permits																																															
25	Expansion of or changes to existing facilities for any process or activity, which requires an amendment of an existing permit or license or a new permit or license in terms of legislation governing the release of emissions, pollution, effluent, unless the facility for the process or activity is included in the list of waste management activities published in terms of section 19 of the National Environmental Management: Waste Act 59 of 2008 in which case the activity is regarded to be excluded.																																															
	LISTING NOTICE 2																																															
1	The construction of facilities or infrastructure, including associated structures or infrastructure, for -																																															
(e)	any process or activity which requires a permit or license in terms of legislation governing the generation or release of emissions, pollution, effluent or waste and which is not identified in GNR. 386 of 2006;																																															

	Annex D	Resource use																								
	Activities and Impacts Matrix: Agri-industry	Land type						Water source						Raw Materials					Energy source					Soil		
	Use of natural resources Use of communal/public resources	Agricultural	Undeveloped - rural	Undeveloped - urban	Developed - urban	Communal	Public / state land	Sea water	Groundwater	River or stream	Wetland	Dam	Water Board/ Water Services Provides / Municipal	Chemicals - non hazardous	Hazardous chemical substances	Fuel - gas	Fuel - petrol, diesel	Coal	Electricity	Liquid Fuel - HFO, diesel, paraffin, petrol	Coal	Gas - LPG	Renewable - wind, solar	Topsoil	Rock material	Fill material / rubble
	LISTING NOTICE 1																									
1	The construction of facilities or infrastructure, including associated structures or infrastructure, for:																									
(f)	the slaughter of animals with a product throughput of 10 000 kilograms or more per year;																									
(h)	the concentration of animals for the purpose of commercial production in densities that exceed:																									
	- 20 square metres per head of cattle and more than 500 head of cattle per facility per year; - 8 square meters per sheep and more than 1 000 sheep per facility per year; - 8 square metres per pig and more than 250 pigs per facility per year excluding piglets that are not yet weaned; - 30 square metres per crocodile at any level of production, excluding crocodiles younger than 6 months; - 3 square metres per head of poultry and more than 250 poultry per facility at any time, excluding chicks younger than 20 days; - 3 square metre per rabbit at and more than 250 rabbits per facility at any time; - 100 square metres per ostrich and more than 50 ostriches per facility per year or 2500 square metres per breeding pair																									
(i)	aquaculture production, including mariculture and algae farms, with a product throughput of 10 000 kilograms or more per year;																									
(j)	agri-industrial purposes, outside areas with an existing land use zoning for industrial purposes, that cover an area of 1 000 square metres or more;																									

	Annex D	Resource use																								
	Activities and Impacts Matrix: Agri-industry	Land type						Water source						Raw Materials					Energy source					Soil		
	Use of natural resources Use of communal/public resources	Agricultural	Undeveloped - rural	Undeveloped - urban	Developed - urban	Communal	Public / state land	Sea water	Groundwater	River or stream	Wetland	Dam	Water Board/ Water Services Provides / Municipal	Chemicals - non hazardous	Hazardous chemical substances	Fuel - gas	Fuel - petrol, diesel	Coal	Electricity	Liquid Fuel - HFO, diesel, paraffin, petrol	Coal	Gas - LPG	Renewable - wind, solar	Topsoil	Rock material	Fill material / rubble
	Decommissioning of industrial activities																									
23	Decommissioning of existing facilities or infrastructure, other than facilities or infrastructure that commenced under an environmental authorisation issued in terms of the EIA Regulations, 2006 made under section 24(5) of the Act and published in GNR 385 of 2006, for:																									
(c)	industrial activities where the facility or the land on which it is located is contaminated or has the potential to be contaminated by any material which may place a restriction on the potential to re-use the site for a different purpose;																									
	Recommissioning of industrial activities																									
24	Recommissioning of existing facilities or infrastructure, other than facilities or infrastructure that commenced under an environmental authorisation issued in terms of the EIA Regulations, 2006 made under section 24(5) of of the Act and published in GNR 385 of 2006, after a period of two years from closure or temporary closure, for:																									
(c)	facilities for any process or activity, which require permission, authorisation, or further authorisation, in terms of legislation governing the release of emissions, pollution, effluent or waste prior to the facility being recommissioned.																									
	Environmental permits																									
25	Expansion of or changes to existing facilities for any process or activity, which requires an amendment of an existing permit or license or a new permit or license in terms of legislation governing the release of emissions, pollution, effluent, unless the facility for the process or activity is included in the list of waste management activities published in terms of section 19 of the National Environmental Management: Waste Act 59 of 2008 in which case the activity is regarded to be excluded.																									
	LISTING NOTICE 2																									
1	The construction of facilities or infrastructure, including associated structures or infrastructure, for:																									
(e)	any process or activity which requires a permit or license in terms of legislation governing the generation or release of emissions, pollution, effluent or waste and which is not identified in GNR. 386 of 2006;																									

	Annex D	Emissions																																	
	Activities and Impacts Matrix: Agri-industry	Air												Effluent						Waste						Noise				Runoff					
	Releases to air, soil/land and water	Point source		Dust		Odours		Non-point source / Fugitive		Greenhouse Gas Emissions		Radioactive emissions		Domestic		Industrial - containing organics		Industrial - containing inorganics		General		Hazardous		Tailings		Continuous noise		Intermittent noise		Contaminated stormwater		Clean runoff					
		Construction	Operation	Construction	Operation	Construction	Operation	Construction	Operation	Construction	Operation	Construction	Operation	Construction	Operation	Construction	Operation	Construction	Operation	Construction	Operation	Construction	Operation	Construction	Operation	Construction	Operation	Construction	Operation	Construction	Operation	Construction	Operation		
	LISTING NOTICE 1																																		
1	The construction of facilities or infrastructure, including associated structures or infrastructure, for:																																		
(f)	the slaughter of animals with a product throughput of 10 000 kilograms or more per year;																																		
(h)	the concentration of animals for the purpose of commercial production in densities that exceed:																																		
	- 20 square metres per head of cattle and more than 500 head of cattle per facility per year; - 8 square meters per sheep and more than 1 000 sheep per facility per year; - 8 square metres per pig and more than 250 pigs per facility per year excluding piglets that are not yet weaned; - 30 square metres per crocodile at any level of production, excluding crocodiles younger than 6 months; - 3 square metres per head of poultry and more than 250 poultry per facility at any time, excluding chicks younger than 20 days; - 3 square metre per rabbit at and more than 250 rabbits per facility at any time; - 100 square metres per ostrich and more than 50 ostriches per facility per year or 2500 square metres per breeding pair																																		
(i)	aquaculture production, including mariculture and algae farms, with a product throughput of 10 000 kilograms or more per year;																																		
(j)	agri-industrial purposes, outside areas with an existing land use zoning for industrial purposes, that cover an area of 1 000 square metres or more;																																		

	Annex D	Emissions																					
	Activities and Impacts Matrix: Agri-industry	Air						Effluent			Waste			Noise		Runoff	
	Releases to air, soil/land and water	Point source	Dust	Odours	Non-point source / Fugitive	Greenhouse Gas Emissions	Radioactive emissions	Domestic	Industrial - containing organics	Industrial - containing inorganics	General	Hazardous	Tailings	Continuous noise	Intermittent noise	Contaminated stormwater	Clean runoff
	Decommissioning of industrial activities																
23	Decommissioning of existing facilities or infrastructure, other than facilities or infrastructure that commenced under an environmental authorisation issued in terms of the EIA Regulations, 2006 made under section 24(5) of the Act and published in GNR 385 of 2006, for:																
(c)	industrial activities where the facility or the land on which it is located is contaminated or has the potential to be contaminated by any material which may place a restriction on the potential to re-use the site for a different purpose;																
	Recommissioning of industrial activities																
24	Recommissioning of existing facilities or infrastructure, other than facilities or infrastructure that commenced under an environmental authorisation issued in terms of the EIA Regulations, 2006 made under section 24(5) of of the Act and published in GNR 385 of 2006, after a period of two years from closure or temporary closure, for:																
(c)	facilities for any process or activity, which require permission, authorisation, or further authorisation, in terms of legislation governing the release of emissions, pollution, effluent or waste prior to the facility being recommissioned.																
	Environmental permits																
25	Expansion of or changes to existing facilities for any process or activity, which requires an amendment of an existing permit or license or a new permit or license in terms of legislation governing the release of emissions, pollution, effluent, unless the facility for the process or activity is included in the list of waste management activities published in terms of section 19 of the National Environmental Management: Waste Act 59 of 2008 in which case the activity is regarded to be excluded.																
	LISTING NOTICE 2																
1	The construction of facilities or infrastructure, including associated structures or infrastructure, for:																
(e)	any process or activity which requires a permit or license in terms of legislation governing the generation or release of emissions, pollution, effluent or waste and which is not identified in GNR. 386 of 2006;																

	Annex E	Location																																													
	Activities and Impacts Matrix: Energy	Physical										Biodiversity									Heritage					Aesthetics				Social						Land use												
	Locational considerations relevant to development footprint Locational considerations relevant to compatibility of development with surroundings	Geological features	Productive soils (Agricultural, Forestry)	Slope	Erodable and unstable soils	Clay soils	Rock and rock layers	Groundwater / exploitable aquifer	Surface water resources (river, stream, wetland, dam)	Microclimate	Floodplain	Unique habitats	Marine/coastal systems	Freshwater systems	Ecological corridor	Critical Biodiversity Area	Red Data species	Endemic species	CE, E or V ecosystems as defined in the NSBA	Intact, pristine or near-pristine indigenous vegetation	Archaeology/paleontology	Cultural landscapes / sites	Scientific Value	Historical buildings / sites	Socail Memory	Scenic/rural landscapes	Unique architecture	Significant townscapes/streetscapes/precinct	Scenic routes	Local community - informal settlement	Local community - formal settlement	Community facilities	Public / community access routes	Public Open Space	Communal facilities/areas	Agricultural	Forestry	Previously mined	Infrastructure	Mixed use	Commercial	Residential	Industrial	Public facility / POS	Declared Nature conservation area / protected area	Urban conservation area	Brownfields (previously developed)	Undeveloped
	LISTING NOTICE 1																																															
	Renewable Energy																																															
1	The construction of facilities or infrastructure, including associated structures or infrastructure, for:																																															
(a)	the generation of electricity where the electricity output is more than 10 megawatts but less than 20 megawatts																																															
	Fuel-fired (coal, gas, diesel, oil) generation plants																																															
1	The construction of facilities or infrastructure, including associated structures or infrastructure, for:																																															
(a)	the generation of electricity where the electricity output is more than 10 megawatts but less than 20 megawatts																																															
	Coal stockpiles at coal-fired power stations																																															
1	The construction of facilities or infrastructure, including associated structures or infrastructure, for:																																															
(c)	the storage of 250 tons or more but less than 100 000 tons of coal;																																															

	Annex E	Location																																													
	Activities and Impacts Matrix: Energy	Physical										Biodiversity									Heritage					Aesthetics				Social						Land use												
	Locational considerations relevant to development footprint **Locational considerations relevant to compatibility of development with surroundings**	Geological features	Productive soils (Agricultural, Forestry)	Slope	Erodable and unstable soils	Clay soils	Rock and rock layers	Groundwater / exploitable aquifer	Surface water resources (river, stream, wetland, dam)	Microclimate	Floodplain	Unique habitats	Marine/coastal systems	Freshwater systems	Ecological corridor	Critical Biodiversity Area	Red Data species	Endemic species	CE, E or V ecosystems as defined in the NSBA	Intact, pristine or near-pristine indigenous vegetation	Archaeology/paleaontology	Cultural landscapes / sites	Scientific Value	Historical buildings / sites	Socail Memory	Scenic/rural landscapes	Unique architecture	Significant townscapes/streetscapes/precinct	Scenic routes	Local community - informal settlement	Local community - formal settlement	Community facilities	Public / community access routes	Public Open Space	Communal facilities/areas	Agricultural	Forestry	Previously mined	Infrastructure	Mixed use	Commercial	Residential	Industrial	Public facility / POS	Declared Nature conservation area / protected area	Urban conservation area	Brownfields (previously developed)	Undeveloped
	Power lines - linear development																																															
1	The construction of facilities or infrastructure, including associated structures or infrastructure, for:																																															
(i)	the transmission and distribution of electricity above ground with a capacity of more than 33 kilovolts and less than 120 kilovolts;																																															
	Decommissioning of facilities for electricity generation (renewable)																																															
23	Decommissioning of existing facilities or infrastructure, other than facilities or infrastructure that commenced under an environmental authorisation issued in terms of the EIA Regulations, 2006 made under section 24(5) of the Act and published in GNR 385 of 2006, for:																																															
(a)	electricity generation;																																															
	Decommissioning of fuel-fired power stations (coal, diesel, oil, gas)																																															
23	Decommissioning of existing facilities or infrastructure, other than facilities or infrastructure that commenced under an environmental authorisation issued in terms of the EIA Regulations, 2006 made under section 24(5) of the Act and published in GNR 385 of 2006, for:																																															
(a)	electricity generation;																																															

	Annex E	Location																																												
	Activities and Impacts Matrix: Energy	Physical										Biodiversity									Heritage					Aesthetics				Social						Land use												
	Locational considerations relevant to development footprint **Locational considerations relevant to compatibility of development with surroundings**	Geological features	Productive soils (Agricultural, Forestry)	Slope	Erodable and unstable soils	Clay soils	Rock and rock layers	Groundwater / exploitable aquifer	Surface water resources (river, stream, wetland, dam)	Microclimate	Floodplain	Unique habitats	Marine/coastal systems	Freshwater systems	Ecological corridor	Critical Biodiversity Area	Red Data species	Endemic species	CE, E or V ecosystems as defined in the NSBA	Intact, pristine or near-pristine indigenous vegetation	Archaeology/paleontology	Cultural landscapes / sites	Scientific Value	Historical buildings / sites	Socail Memory	Scenic/rural landscapes	Unique architecture	Significant townscapes/streetscapes/precinct	Scenic routes	Local community - informal settlement	Local community - formal settlement	Community facilities	Public / community access routes	Public Open Space	Communal facilities/areas	Agricultural	Forestry	Previously mined	Infrastructure	Mixed use	Commercial	Residential	Industrial	Public facility / POS	Declared Nature conservation area / protected area	Urban conservation area	Brownfields (previously developed)	Undeveloped
	Decommissioning of nuclear power facilities																																															
23	Decommissioning of existing facilities or infrastructure, other than facilities or infrastructure that commenced under an environmental authorisation issued in terms of the EIA Regulations, 2006 made under section 24(5) of the Act and published in GNR 385 of 2006, for:																																															
(b)	nuclear reactors and nuclear fuel																																															
	Recommissioning of facilities for electricity generation (renewable)																																															
24	Recommissioning of existing facilities or infrastructure, other than facilities or infrastructure that commenced under an environmental authorisation issued in terms of the EIA Regulations, 2006 made under section 24(5) of of the Act and published in GNR 385 of 2006, after a period of two years from closure or temporary closure, for:																																															
(a)	electricity generation;																																															

	Annex E	Location																																													
	Activities and Impacts Matrix: Energy	**Physical**										**Biodiversity**									**Heritage**					**Aesthetics**				**Social**						**Land use**												
	Locational considerations relevant to development footprint **Locational considerations relevant to compatibility of development with surroundings**	Geological features	Productive soils (Agricultural, Forestry)	Slope	Erodable and unstable soils	Clay soils	Rock and rock layers	Groundwater / exploitable aquifer	Surface water resources (river, stream, wetland, dam)	Microclimate	Floodplain	Unique habitats	Marine/coastal systems	Freshwater systems	Ecological corridor	Critical Biodiversity Area	Red Data species	Endemic species	CE, E or V ecosystems as defined in the NSBA	Intact, pristine or near-pristine indigenous vegetation	Archaeology/paleoentology	Cultural landscapes / sites	Scientific Value	Historical buildings / sites	Socail Memory	Scenic/rural landscapes	Unique architecture	Significant townscapes/streetscapes/precinct	Scenic routes	Local community - informal settlement	Local community - formal settlement	Community facilities	Public / community access routes	Public Open Space	Communal facilities/areas	Agricultural	Forestry	Previously mined	Infrastructure	Mixed use	Commercial	Residential	Industrial	Public facility / POS	Declared Nature conservation area / protected area	Urban conservation area	Brownfields (previously developed)	Undeveloped
	Recommissioning of fuel-fired power stations (coal, diesel, oil, gas)																																															
24	Recommissioning of existing facilities or infrastructure, other than facilities or infrastructure that commenced under an environmental authorisation issued in terms of the EIA Regulations, 2006 made under section 24(5) of of the Act and published in GNR 385 of 2006, after a period of two years from closure or temporary closure, for:																																															
(a)	electricity generation;																																															
	Recommissioning of nuclear power facilities																																															
24	Recommissioning of existing facilities or infrastructure, other than facilities or infrastructure that commenced under an environmental authorisation issued in terms of the EIA Regulations, 2006 made under section 24(5) of of the Act and published in GNR 385 of 2006, after a period of two years from closure or temporary closure, for:																																															
(b)	nuclear reactors and nuclear fuel storage;																																															

	Annex E	Location																																													
	Activities and Impacts Matrix: Energy	Physical										Biodiversity									Heritage					Aesthetics				Social						Land use												
	Locational considerations relevant to development footprint Locational considerations relevant to compatibility of development with surroundings	Geological features	Productive soils (Agricultural, Forestry)	Slope	Erodable and unstable soils	Clay soils	Rock and rock layers	Groundwater / exploitable aquifer	Surface water resources (river, stream, wetland, dam)	Microclimate	Floodplain	Unique habitats	Marine/coastal systems	Freshwater systems	Ecological corridor	Critical Biodiversity Area	Red Data species	Endemic species	CE, E or V ecosystems as defined in the NSBA	Intact, pristine or near-pristine indigenous vegetation	Archaeology/paleontology	Cultural landscapes / sites	Scientific Value	Historical buildings / sites	Socail Memory	Scenic/rural landscapes	Unique architecture	Significant townscapes/streetscapes/precinct	Scenic routes	Local community - informal settlement	Local community - formal settlement	Community facilities	Public / community access routes	Public Open Space	Communal facilities/areas	Agricultural	Forestry	Previously mined	Infrastructure	Mixed use	Commercial	Residential	Industrial	Public facility / POS	Declared Nature conservation area / protected area	Urban conservation area	Brownfields (previously developed)	Undeveloped
	Environmental permits																																															
25	Expansion of or changes to existing facilities for any process or activity, which requires an amendment of an existing permit or license or a new permit or license in terms of legislation governing the release of emissions, pollution, effluent, unless the facility for the process or activity is included in the list of waste management activities published in terms of section 19 of the National Environmental Management: Waste Act, 2008 (Act No. 59 of 2008) in which case the activity is regarded to be excluded.																																															
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	Renewable energy generation facilities																																															
1	The construction of facilities or infrastructure, including associated structures or infrastructure, for:																																															
(a)	the generation of electricity where:																																															
(i)	the electricity output is 20 megawatts																																															
(ii)	the elements of the facility cover a combined area in excess of 1 hectare;																																															

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	Activities and Impacts Matrix: Energy	**Physical**										**Biodiversity**									**Heritage**					**Aesthetics**				**Social**						**Land use**												
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	Fuel-fired (coal, gas, diesel, oil) generation plants																																															
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1	The construction of facilities or infrastructure, including associated structures or infrastructure, for:																																															
(e)	any process or activity which requires a permit or license in terms of legislation governing the generation or release of emissions, pollution, effluent or waste and which is not identified in GNR. 386 of 2006;																																															

	Annex E	Resource use																											
	Activities and Impacts Matrix: Energy	Land type						Water source						Raw Materials							Energy source					Soil			
	Use of natural resources Use of communal/public resources	Agricultural	Undeveloped - rural	Undeveloped - urban	Developed - urban	Communal	Public / state land	Sea water	Groundwater	River or stream	Wetland	Dam	Water Board/ Water Services Provides / Municipal	Chemicals - non hazardous	Hazardous chemicals / dangerous goods	Fuel - gas	Fuel - petrol, diesel	Coal	Uranium	Catalysts	Electricity	Liquid Fuel - HFO, diesel, paraffin, petrol	Coal	Gas - LPG	Renewable - wind, solar	Topsoil	Rock material	Fill material / rubble
	LISTING NOTICE 1																												
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	Coal stockpiles at coal-fired power stations																												
1	The construction of facilities or infrastructure, including associated structures or infrastructure, for:																												
(c)	the storage of 250 tons or more but less than 100 000 tons of coal;																												
	Power lines - linear development																												
1	The construction of facilities or infrastructure, including associated structures or infrastructure, for:																												
(l)	the transmission and distribution of electricity above ground with a capacity of more than 33 kilovolts and less than 120 kilovolts;																												
	Decommissioning of facilities for electricity generation (renewable)																												
23	Decommissioning of existing facilities or infrastructure, other than facilities or infrastructure that commenced under an environmental authorisation issued in terms of the EIA Regulations, 2006 made under section 24(5) of the Act and published in GNR 385 of 2006, for:																												
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	Annex E	Emissions																															
	Activities and Impacts Matrix: Energy	Air												Effluent						Waste						Noise				Runoff			
	Releases to air, soil/land and water	Point source		Dust		Odours		Non-point source / Fugitive		Greenhouse Gas Emissions		Radioactive emissions		Domestic		Industrial - containing organics		Industrial - containing inorganics		General		Hazardous		Tailings		Continuous noise		Intermittent noise		Contaminated stormwater		Clean runoff	
		Construction	Operation	Construction	Operation	Construction	Operation	Construction	Operation	Construction	Operation	Construction	Operation	Construction	Operation	Construction	Operation	Construction	Operation	Construction	Operation	Construction	Operation	Construction	Operation	Construction	Operation	Construction	Operation	Construction	Operation	Construction	Operation
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	Annex F	Location																																													
	Activities and Impacts Matrix: Large Scale Property Development	**Physical**										**Biodiversity**									**Heritage**					**Aesthetics**				**Social**						**Land use**													
	Locational considerations relevant to development footprint **Locational considerations relevant to compatibility of development with surroundings**	Geological features	Productive soils (Agricultural, Forestry)	Slope	Erodable and unstable soils	Clay soils	Rock and rock layers	Groundwater / exploitable aquifer	Surface water resources (river, stream, wetland, dam)	Microclimate	Floodplain	Unique habitats	Marine/coastal systems	Freshwater systems	Ecological corridor	Critical Biodiversity Area	Red Data species	Endemic species	CE, E or V ecosystems as defined in the NSBA	Intact, pristine or near-pristine indigenous vegetation	Archaeology/paleontology	Cultural landscapes / sites	Scientific Value	Historical buildings / sites	Socail Memory	Scenic/rural landscapes	Unique architecture	Significant townscapes/streetscapes/precinct	Scenic routes	Local community - informal settlement	Local community - formal settlement	Community facilities	Public / community access routes	Public Open Space	Communal facilities/areas	Agricultural	Forestry	Previously mined	Infrastructure	Mixed use	Commercial	Residential	Industrial	Public facility / POS	Declared Nature conservation area / protected area	Urban conservation area	Brownfields (previously developed)	Undeveloped	National, Provincial and Municipal Policy
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1	The construction of facilities or infrastructure, including associated structures or infrastructure, for:																																																
(d)	resorts, lodges, hotels or other tourism and hospitality facilities in a protected area contemplated in the National Environmental Management: Protected Areas Act, 2003 (Act No. 57 of 2003);																																																
	Sports facilities																																																
1	The construction of facilities or infrastructure, including associated structures or infrastructure, for:																																																
(e)	any purpose where lawns, playing fields or sports tracks covering an area of more than three hectares, but less than 10 hectares, will be established;																																																
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	Transformation of land																																																	
16	The transformation of undeveloped, vacant or derelict land to:																																																	
(a)	establish infill development covering an area of 5 hectares or more, but less than 20 hectares; or																																																	
(b)	residential, mixed, retail, commercial, industrial or institutional use where such development does not constitute infill and where the total area to be transformed is bigger than 1 ha.																																																		
20	The transformation of an area zoned for use as public open space or for a conservation purpose to another use.																																																	
	Phased development																																																	
17	Phased activities where any one phase of the activity may be below a threshold specified in this Schedule but where a combination of the phases, including expansions or extensions, will exceed a specified threshold.																																																	
	Sub-division of land																																																	
18	The subdivision of portions of land 9 hectares or larger into portions of 5 hectares or less.																																																	

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	Industrial development																																																
19	The development of a new facility or the transformation of an existing facility for the conducting of manufacturing processes, warehousing, bottling, packaging, or storage, which, including associated structures or infrastructure, occupies an area of 1000 square metres or more outside an existing area zoned for industrial purposes.																																																
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	Activities and Impacts Matrix: Large Scale Property Development	Land type						Water source						Raw Materials								Energy source					Soil		
	Use of natural resources Use of communal/public resources	Agricultural/Forestry	Undeveloped - rural	Undeveloped - urban	Developed - urban	Communal	Public / state land	Sea water	Groundwater	River or stream	Wetland	Dam	Water Board/ Water Services Provides / Municipal	Chemicals - non hazardous	Hazardous chemical substances	Building materials	Fuel - gas	Fuel - petrol, diesel	Recycled concrete and rubble	Cement	Bituman	Coal	Electricity	Liquid Fuel - HFO, diesel, paraffin, petrol	Coal	Gas - LPG	Renewable - wind, solar	Topsoil	Rock material	Fill material / rubble
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	Activities and Impacts Matrix: Large Scale Property Development	Air												Effluent						Waste														Noise				Runoff			
	Releases to air, soil/land and water	Point source		Vehicle		Dust		Odours		Non-point source / Fugitive		Radioactive emissions		Domestic		Industrial - containing organics		Industrial - containing inorganics		Residential		Garden		Builders waste		Nuclear or Radioactive		Health Services		Special Indistrial		Commercial and retail		Industrial		Hazardous		Continuous noise		Intermittent noise		Contaminated stormwater		Clean runoff	
		Construction	Operation	Construction	Operation	Construction	Operation	Construction	Operation	Construction	Operation	Construction	Operation	Construction	Operation	Construction	Operation	Construction	Operation	Construction	Operation	Construction	Operation	Construction	Operation	Construction	Operation	Construction	Operation	Construction	Operation	Construction	Operation	Construction	Operation	Construction	Operation	Construction	Operation	Construction	Operation	Construction	Operation
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(e)	any purpose where lawns, playing fields or sports tracks covering an area of more than three hectares, but less than 10 hectares, will be established;																																								
(f)	sport spectator facilities with the capacity to hold 8000 spectators or more;																																								
	Transformation of land																																								
16	The transformation of undeveloped, vacant or derelict land to:																																								
(a)	establish infill development covering an area of 5 hectares or more, but less than 20 hectares; or																																								
(b)	residential, mixed, retail, commercial, industrial or institutional use where such development does not constitute infill and where the total area to be transformed is bigger than 1 ha.																																								

	Annex F	Emissions																															
	Activities and Impacts Matrix: Large Scale Property Development	**Air**						**Effluent**			**Waste**													**Noise**		**Runoff**							
	Releases to air, soil/land and water	Point source	Vehicle	Dust	Odours	Non-point source / Fugitive	Radioactive emissions	Domestic	Industrial - containing organics	Industrial - containing inorganics	Residential	Garden	Builders waste	Nuclear or Radioactive	Health Services	Special Indistrial	Commercial and retail	Industrial	Hazardous	Continuous noise	Intermittent noise	Contaminated stormwater	Clean runoff										
20	The transformation of an area zoned for use as public open space or for a conservation purpose to another use.																																
	Phased development																																
17	Phased activities where any one phase of the activity may be below a threshold specified in this Schedule but where a combination of the phases, including expansions or extensions, will exceed a specified threshold.																																
	Sub-division of land																																
18	The subdivision of portions of land 9 hectares or larger into portions of 5 hectares or less.																																
	Industrial development																																
19	The development of a new facility or the transformation of an existing facility for the conducting of manufacturing processes, warehousing, bottling, packaging, or storage, which, including associated structures or infrastructure, occupies an area of 1000 square metres or more outside an existing area zoned for industrial purposes.																																
	LISTING NOTICE 2																																
	Sports facilities																																
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(t)	any purpose where lawns, playing fields or sports tracks covering an area of 10 hectares or more, will be established.																																
	Size of development footprint																																
2	Any development activity, including associated structures and infrastructure, where the total area of the developed area is, or is intended to be, 20 hectares or more.																																

	Annex G	Location																																												
	Activities and Impacts Matrix: Social Infrastructure & Housing	Physical										Biodiversity									Heritage					Aesthetics				Social						Land use												
	Locational considerations relevant to development footprint **Locational considerations relevant to compatibility of development with surroundings**	Geological features	Productive soils (Agricultural, Forestry)	Slope	Erodable and unstable soils	Clay soils	Rock and rock layers	Groundwater / exploitable aquifer	Surface water resources (river, stream, wetland, dam)	Microclimate	Floodplain	Unique habitats	Marine/coastal systems	Freshwater systems	Ecological corridor	Critical Biodiversity Area	Red Data species	Endemic species	CE, E or V ecosystems as defined in the NSBA	Intact, pristine or near-pristine indigenous vegetation	Archaeology/paleoentology	Cultural landscapes / sites	Scientific Value	Historical buildings / sites	Socail Memory	Scenic/rural landscapes	Unique architecture	Significant townscapes/streetscapes/precinct	Scenic routes	Local community - informal settlement	Local community - formal settlement	Community facilities	Public / community access routes	Public Open Space	Communal facilities/areas	Agricultural	Forestry	Previously mined	Infrastructure	Mixed use	Commercial	Residential	Industrial	Public facility / POS	Declared Nature conservation area / protected area	Urban conservation area	Brownfields (previously developed)	Undeveloped
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(b)	residential, mixed, retail, commercial, industrial or institutional use where such development does not constitute infill and where the total area to be transformed is bigger than 1 hectare.																																															
	Transport infrastructure																																															
15	The construction of a road that is wider than 4 metres or that has a reserve wider than 6 metres, excluding roads that fall within the ambit of another listed activity or which are access roads of less than 30 metres long.																																															

	Annex G	**Location**																																													
	Activities and Impacts Matrix: Social Infrastructure & Housing	**Physical**										**Biodiversity**									**Heritage**					**Aesthetics**				**Social**						**Land use**												
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	Sewage and water infrastructure																																															
1	The construction of facilities or infrastructure, including associated structures or infrastructure, for:																																															
(k)	the bulk transportation of sewage and water, including storm water, in pipelines with: - an internal diameter of 0,36 metres or more - a peak throughput of 120 litres per second or more;																																															
	Powerlines																																															
(l)	the transmission and distribution of electricity above ground with a capacity of more than 33 kilovolts and less than 120 kilovolts;																																															
	LISTING NOTICE 2																																															
	Transport Infrastructure																																															
1	The construction of facilities or infrastructure, including associated structures or infrastructure, for:																																															
(s)	rail transportation, excluding railway lines and sidings in industrial areas and underground railway lines in mines, but including - - railway lines - stations - shunting yards.																																															

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	Activities and Impacts Matrix: Social Infrastructure & Housing	**Physical**										**Biodiversity**									**Heritage**					**Aesthetics**				**Social**						**Land use**												
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5	The route determination of roads and design of associated physical infrastructure, including roads that have not yet been built for which routes have been determined before the publication of this notice and which has not been authorised by a competent authority in terms of the Environmental Impact Assessment Regulations, 2006 made under section 24(5) of the Act and published in Government Notice No. R. 385 of 2006, where: - it is a national road as defined in section 40 of the South African National Roads Agency Limited and National Roads Act, 1998 (Act No. 7 of 1998) - it is a road administered by a provincial authority - the road reserve is wider than 30 metres - the road will cater for more than one lane of traffic in both directions																																															

	Annex G	Resource use																												
	Activities and Impacts Matrix: Social Infrastructure & Housing	Land type						Water source						Raw Materials								Energy source					Soil		
	Use of natural resources Use of communal/public resources	Agricultural/Forestry	Undeveloped - rural	Undeveloped - urban	Developed - urban	Communal	Public / state land	Sea water	Groundwater	River or stream	Wetland	Dam	Water Board/ Water Services Provides / Municipal	Chemicals - non hazardous	Hazardous chemical substances	Building materials	Fuel - gas	Fuel - petrol, diesel	Recycled concrete and rubble	Cement	Bituman	Coal	Electricity	Liquid Fuel - HFO, diesel, paraffin, petrol	Coal	Gas - LPG	Renewable - wind, solar	Topsoil	Rock material	Fill material / rubble
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	Annex G	Emissions																																					
	Activities and Impacts Matrix: Social Infrastructure & Housing	Air												Effluent						Waste																Noise				Runoff			
	Releases to air, soil/land and water	Point source		Vehicle		Dust		Odours		Non-point source / Fugitive		Radioactive emissions		Domestic		Industrial - containing organics		Industrial - containing inorganics		Residential		Garden		Builders waste		Nuclear or Radioactive		Health Services		Special Indistrial		Commercial and retail		Industrial		Hazardous		Continuous noise		Intermittent noise		Contaminated stormwater		Clean runoff	
		Construction	Operation	Construction	Operation	Construction	Operation	Construction	Operation	Construction	Operation	Construction	Operation	Construction	Operation	Construction	Operation	Construction	Operation	Construction	Operation	Construction	Operation	Construction	Operation	Construction	Operation	Construction	Operation	Construction	Operation	Construction	Operation	Construction	Operation	Construction	Operation	Construction	Operation	Construction	Operation	Construction	Operation
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