

3.1 THE EIA PROCESS

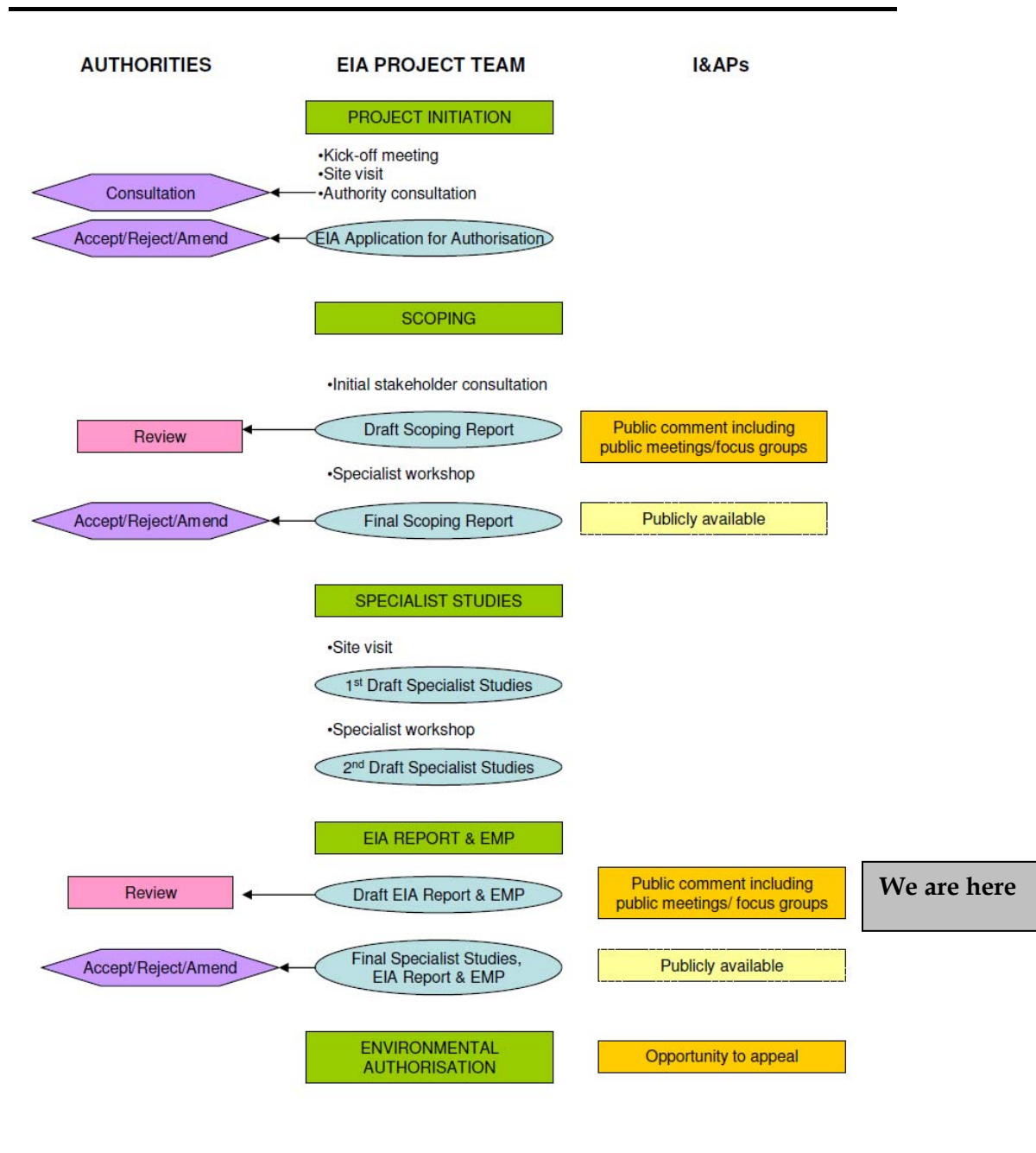
EIA is a systematic process that identifies and evaluates the potential impacts (positive and negative) that a proposed project may have on the bio-physical and socio-economic environment, and identifies mitigation measures that need to be implemented in order to avoid, minimise or reduce the negative impacts and also identifies measures to enhance positive impacts. The overall EIA process required for developments in South Africa is shown schematically in *Figure 3.1*. The EIA is not fully a linear process, but one where several stages are carried out in parallel and where the assumptions and conclusions are revisited and modified as the project progresses. The following sections provide additional detail regarding the key stages in the EIA process. These stages are:

- project initiation;
- scoping study phase; and
- integration and assessment phase.

Separate and prior to ERM being appointed to undertake the EIA for the proposed Roggeveld wind farm, G7 erected of wind masts for wind monitoring purposes. Activities in connection with the erection of wind masts are considered outside the scope of the Roggeveld wind farm EIA currently being undertaken, i.e. activities in connection with wind masts are not considered in furtherance of proposed activities associated with the wind farm.

The proponent is in the process of applying with the local municipality for appropriate zoning approvals for the wind farm. This process is outside the EIA process.

Figure 3.1 EIA Process Flow Diagram



3.1.1 Project Initiation Phase

The project initiation phase began with a project inception meeting followed by a review of available and relevant project related background information. Key activities during this phase of the project included the following:

- An initial site visit by the applicant and ERM on 21 July 2010;
- Submission of an EIA Application for Authorisation form to DEA on 16 July 2010. DEA's Acknowledgement of Receipt and approval to proceed with the Scoping Study was received on 20 July 2010, reference 12/12/20/1988;

- An authorities meeting with DEA, ERM and G7 was held on 29 June 2010 to discuss and agree on the proposed approach to the Scoping/EIA;
- Compilation of a preliminary database of neighbouring landowners, authorities (local and provincial), Non-Governmental Organisations and other key stakeholders into a database of registered I&APs which continues to be expanded during the ongoing EIA process; and
- Compilation of a Background Information Document (BID) for distribution to I&APs.

3.1.2 *Scoping Phase*

Environmental scoping has several important functions aimed at facilitating decision-making. These include the following:

- providing a description of the proposed project and associated activities;
- reviewing existing information to gain an understanding of the baseline environmental conditions;
- identifying any gaps in information and uncertainties;
- investigating and screening of alternatives;
- obtaining input from I&APs about their issues and concerns;
- identification and initial assessment of potential environmental and social impacts associated with the project; and
- identifying potential mitigation and management measures.

Accordingly, the Scoping Report provided a detailed overview of the project, the associated Public Participation Process, and proposed an EIA methodology. It also included a preliminary identification and evaluation of potential impacts and Plan of Study for the EIA. The Draft Scoping Report was released for a 40-day public and authority review period (01 October 2010 to 12 November 2010) prior to submission to the DEA. The Scoping Report was received by the DEA on 03 January 2011 and accepted by the DEA on 07 March 2011 (see *Annex D*).

Public Participation

The tasks relating to public participation during the Scoping Phase and included in the Scoping Report are summarised below:

- Development and expansion of the I&AP database;
- The project was advertised in *Die Burger* (Afrikaans) and *Cape Times* (English) on Wednesday 21 July 2010 and *Die Noordwester* (Afrikaans and English) on Friday 23 July 2010 (see *Annex C*). The advertisements informed the public of the project and requested them to register as I&APs if they would like to participate in the EIA process. I&APs that responded to the advertisements were included on the project stakeholder database;

- Distribution of the Background Information Document (BID);
- Erection of on-site notices;
- The Draft Scoping Report was released for a 40-day public and authority comment period (1 October – 12 November 2010). A notification letter was sent to all registered and identified I&APs to inform them of the release of the report and that the report could be reviewed at the Laingsburg and Sutherland Libraries and on the project website;
- A public meeting/open day was held during the Scoping Phase (on 27 October 2010 at Laingsburg) to afford I&APs and the general public the opportunity to comment on the proposed project and engage with the EIA team. Notification of these meetings were sent to all registered I&APs when the Draft Scoping Report was released for comment; and
- Throughout the Scoping process, issues and concerns raised by I&APs and authorities, and communicated to ERM via post, email or fax were recorded, incorporated into the report and submitted with the Final Scoping Report.

3.1.3 *Integration and Assessment*

The final phase of the EIA is the Integration and Assessment Phase, which is described in detail in the Plan of Study for EIA included in the Scoping Report. A synthesis of the specialist studies, which addresses the key issues identified during the Scoping Phase, is documented in this EIR. Relevant technical and specialist studies are included as appendices to this report.

The Draft EIR will be made available to I&APs for a 40-day comment period, and a notification letter will be sent to all registered and identified I&APs to inform them of the release of the Draft EIR and where the report can be reviewed.

A public meeting will be held to communicate the findings of the EIA and afford stakeholders the opportunity to comment on the Draft EIR and engage with the EIA team.

Comments received on the Draft EIR will be assimilated and the EIA project team will provide appropriate responses to comments. A Comments and Responses Report will be appended in *Annex C* of the Final EIR to be submitted to DEA for decision-making.

Specialist Studies

During the Specialist Study phase, the appointed specialists gathered data relevant to identifying and assessing environmental impacts that may occur as a result of the proposed project. They assisted the project team in assessing

potential impacts according to a predefined assessment methodology included in the Scoping Report. Specialists have also suggested ways in which negative impacts could be mitigated and benefits enhanced.

The independent specialists responsible for the specialist studies are listed in *Table 3.1*.

Table 3.1 *Independent Specialist Studies and Appointed Specialists*

Specialist Study	Specialists and Organisation	Qualifications
Ecological and Biodiversity study	Simon Todd (Simon Todd Consulting)	MSc Conservation Biology, University of Cape Town
Bird study	Andrew Jenkins (AVISENSE Ornithological Consulting)	PhD Zoology, University of Cape Town
Bats study	Kate MacEwan (Natural Scientific Services)	PrSciNat - Zoology BSc Zoology Honours, University of the Witwatersrand (Wits) MSc (Bat Conservation Biology - Wits) in progress
Noise study	Adrian Jongens (Jongens Keet Associates)	M.Sc. Electrical Engineering, University of Cape Town
Visual and Landscape study	Bernard Oberholzer, (Bernard Oberholzer Landscape Architect (Bola))	B.Arch, University of Cape Town and MLA, Univ. of Pennsylvania
	Quinton Lawson (MLB Architects)	PrArch BArch, University of Natal
Archaeological, Heritage and Paleontological study	Tim Hart (ACO Associates cc.)	MA University of Cape Town and Texas A&M University
Socio-economic study	Kerryn McKune Desai (ERM Southern Africa)	MA Geography of Third World Development Royal Holloway, University of London BA Hons Environmental & Geographical Science, University of Cape Town

The specialist reports and declarations of each specialist are included in *Annex E - K*. The socio-economic study undertaken by ERM's social specialist Kerryn McKune Desai and has been incorporated directly into the EIR in Chapters 6 and 14.

Environmental Impact Report (EIR)

This EIR provides a description of the project, a synthesis of relevant baseline information and identifies and evaluates the key issues and opportunities associated with the wind farm development. Recommendations on the mitigation of adverse impacts and the enhancement of positive impacts associated with the proposed project are also included. These mitigation measures / enhancements are translated into specific actions in the draft Environmental Management Programme (EMP) (see *Annex L*).

Public Participation

The following tasks relating to public participation will be undertaken as part of the EIA phase, see *Table 3.2*:

- The Draft EIR and EMP will be released for a 40-day comment period and Registered I&APs notified of the release of the Draft EIR. The full report will be made available at key locations and on the project website.
- A public meeting will be held to afford I&APs and the general public the opportunity to comment on the proposed project and engage with the EIA team. The meeting will be held at an accessible venue and facilitated (and partly presented) in Afrikaans in order to ensure that the information is made accessible to the community.
- Comments received on the Draft EIR and EMP will be assimilated and the project team will provide appropriate responses to comments. A Comments and Responses Report will be appended the Final EIR in *Annex C*.
- All registered I&APs will be notified of the submission of the Final EIR to the DEA and the availability of the Final EIR and EMP.
- All registered I&APs will be notified once a decision has been issued by the DEA. An appeal period will follow the issuing of the Environmental Authorisation.
- G7 are committed to continue to engage with local communities and stakeholders throughout construction and operation of the project. Communication with local communities and other local stakeholders will be a key part of this engagement process. Development of a Community Engagement Plan (CEP) will be important to facilitate this communication.

Table 3.2 *Summary of Public Participation Activities undertaken to date*

Activity	Date
Site Notice Placement at Roggeveld	21 July 2010
Distribution of BID to neighbouring landowners and commenting authorities	21 July 2010
Notification advert placed in the Die Burger	21 July 2010
Notification advert placed in the Cape Times	21 July 2010
Notification advert placed in Die Noordwester	23 July 2010
Distribution of Draft Scoping Report for comment	1 October 2010
Public Meeting in Laingsburg	27 October 2010
Notification of submission of Final Scoping Report to DEA	4 January 2011
Distribution of Draft EIR for comment	Current

Authority Consultation and Involvement

As indicated above the Scoping Report and Plan of Study for EIA was submitted and accepted by the DEA (see *Annex D* for the Acceptance Letter).

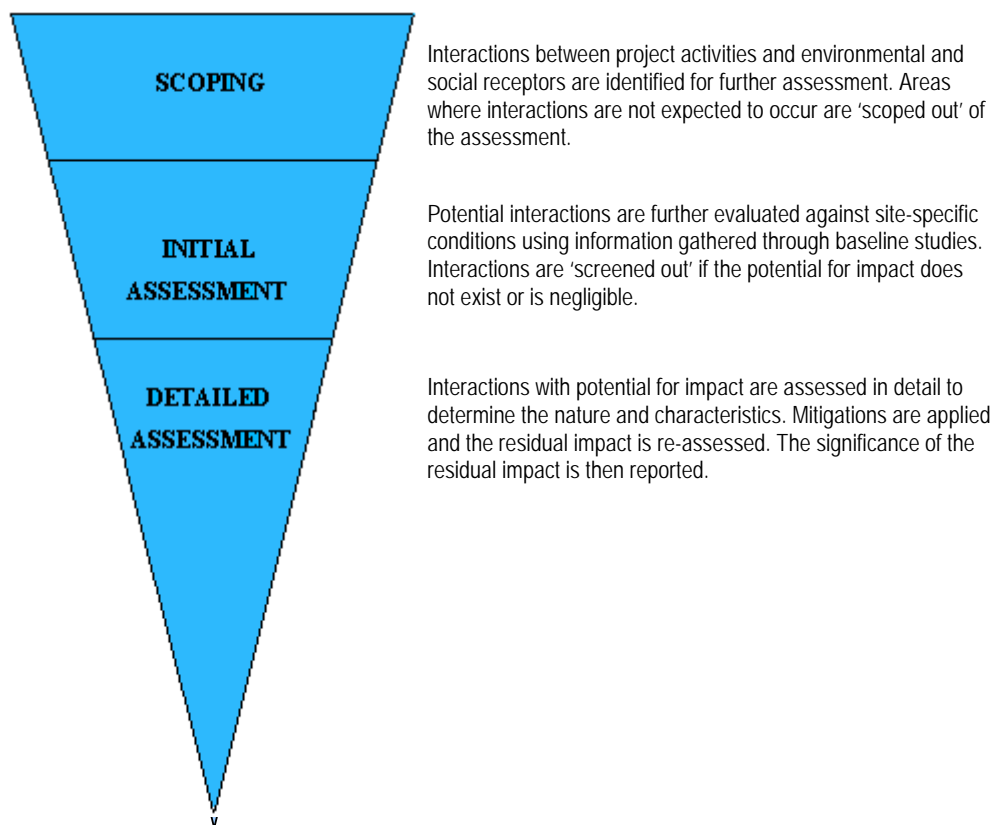
The Western Cape Department of Environmental Affairs and Development Planning (DEA&DP) and the Northern Cape Department of Environment and Conservation (DENC), the provincial commenting authorities, will be engaged for their comments on the Draft EIR as will other commenting authorities including but not limited to the Heritage Western Cape, Heritage Northern Cape, SAHRA, CapeNature, Department of Water Affairs and the Department of Agriculture.

3.2 IMPACT ASSESSMENT METHODOLOGY

3.2.1 Impact Assessment Process

The following diagram (*Figure 3.2*) describes the impact identification and assessment process through scoping, screening and detailed impact assessment. The methodology for detailed impact assessment is outlined in *Section Error! Reference source not found.* below.

Figure 3.2 Impact Assessment Process



3.2.2

Impact Assessment Methodology

The purpose of impact assessment and mitigation is to identify and evaluate the significance of potential impacts on identified receptors and resources according to a defined assessment criteria and to develop and describe measures that will be taken to avoid or minimise any potential adverse effects and to enhance potential benefits.

Impact Types and Definitions

An impact is any change to a resource or receptor brought about by the presence of a project component or by the execution of a project related activity. The evaluation of baseline data provides crucial information for the process of evaluating and describing how the project could affect the bio-physical and socio-economic environment.

Impacts are described as a number of types as summarised in *Table 3.1*. Impacts are also described as *associated*, those that will occur, and *potential*, those that may occur.

Table 3.1 *Impact Nature and Type*

Nature or Type	Definition
Positive	An impact that is considered to represent an improvement on the baseline or introduces a positive change.
Negative	An impact that is considered to represent an adverse change from the baseline, or introduces a new undesirable factor.
Direct impact	Impacts that result from a direct interaction between a planned project activity and the receiving environment/receptors (e.g. between occupation of a site and the pre-existing habitats or between an effluent discharge and receiving water quality).
Indirect impact	Impacts that result from other activities that are encouraged to happen as a consequence of the Project (e.g. in-migration for employment placing a demand on resources).
Cumulative impact	Impacts that act together with other impacts (including those from concurrent or planned future third party activities) to affect the same resources and/or receptors as the Project.

Assessing Significance

Impacts are described in terms of ‘*significance*’. Significance is a function of the **magnitude** of the impact and the **likelihood** of the impact occurring. Impact magnitude (sometimes termed *severity*) is a function of the **extent, duration and intensity** of the impact. The criteria used to determine significance are summarised in *Table 3.2*. Once an assessment is made of the magnitude and likelihood, the impact significance is rated through a matrix process as shown in *Table 3.3* and *Table 3.4*.

Significance of an impact is qualified through a statement of the **degree of confidence**. Confidence in the prediction is a function of uncertainties, for example, where information is insufficient to assess the impact. Degree of confidence is expressed as low, medium or high.

Table 3.2 Significance Criteria

<i>Impact Magnitude</i>	
Extent	<p>On-site – impacts that are limited to the boundaries of the development site.</p> <p>Local – impacts that affect an area in a radius of 20km around the development site.</p> <p>Regional – impacts that affect regionally important environmental resources or are experienced at a regional scale as determined by administrative boundaries, habitat type/ecosystem.</p> <p>National – impacts that affect nationally important environmental resources or affect an area that is nationally important/ or have macro-economic consequences.</p>
Duration	<p>Temporary – impacts are predicted to be of short duration and intermittent/occasional.</p> <p>Short-term – impacts that are predicted to last only for the duration of the construction period.</p> <p>Long-term – impacts that will continue for the life of the Project, but ceases when the project stops operating.</p> <p>Permanent – impacts that cause a permanent change in the affected receptor or resource (e.g. removal or destruction of ecological habitat) that endures substantially beyond the project lifetime.</p>
Intensity	<p>BIOPHYSICAL ENVIRONMENT: <i>Intensity can be considered in terms of the sensitivity of the biodiversity receptor (ie. habitats, species or communities).</i></p> <p>Negligible – the impact on the environment is not detectable.</p> <p>Low – the impact affects the environment in such a way that natural functions and processes are not affected.</p> <p>Medium – where the affected environment is altered but natural functions and processes continue, albeit in a modified way.</p> <p>High – where natural functions or processes are altered to the extent that it will temporarily or permanently cease.</p> <p><i>Where appropriate, national and/or international standards are to be used as a measure of the impact. Specialist studies should attempt to quantify the magnitude of impacts and outline the rationale used.</i></p> <hr/> <p>SOCIO-ECONOMIC ENVIRONMENT: <i>Intensity can be considered in terms of the ability of project affected people/communities to adapt to changes brought about by the Project.</i></p> <p>Negligible – there is no perceptible change to people’s livelihood</p> <p>Low - People/communities are able to adapt with relative ease and maintain pre-impact livelihoods.</p> <p>Medium - Able to adapt with some difficulty and maintain pre-impact livelihoods but only with a degree of support.</p> <p>High - Those affected will not be able to adapt to changes and continue to maintain-pre impact livelihoods.</p>
Likelihood - the likelihood that an impact will occur	
Unlikely	The impact is unlikely to occur.
Likely	The impact is likely to occur under most conditions.
Definite	The impact will occur.

Once a rating is determined for magnitude and likelihood, the following matrix can be used to determine the impact significance.

Table 3.3 *Significance Rating Matrix*

		SIGNIFICANCE		
		LIKELIHOOD		
		Unlikely	Likely	Definite
MAGNITUDE	Negligible	Negligible	Negligible	Minor
	Low	Negligible	Minor	Minor
	Medium	Minor	Moderate	Moderate
	High	Moderate	Major	Major

Table 3.4 *Significance Colour Scale*

Negative ratings	Positive ratings
Negligible	Negligible
Minor	Minor
Moderate	Moderate
Major	Major

Table 3.5 *Significance Definitions*

Significance definitions	
Negligible significance	An impact of negligible significance (or an insignificant impact) is where a resource or receptor (including people) will not be affected in any way by a particular activity, or the predicted effect is deemed to be ‘negligible’ or ‘imperceptible’ or is indistinguishable from natural background variations.
Minor significance	An impact of minor significance is one where an effect will be experienced, but the impact magnitude is sufficiently small (with and without mitigation) and well within accepted standards, and/or the receptor is of low sensitivity/value.
Moderate significance	An impact of moderate significance is one within accepted limits and standards. The emphasis for moderate impacts is on demonstrating that the impact has been reduced to a level that is as low as reasonably practicable (ALARP). This does not necessarily mean that ‘moderate’ impacts have to be reduced to ‘minor’ impacts, but that moderate impacts are being managed effectively and efficiently.
Major significance	An impact of major significance is one where an accepted limit or standard may be exceeded, or large magnitude impacts occur to highly valued/sensitive resource/receptors. A goal of the EIA process is to get to a position where the Project does not have any major residual impacts, certainly not ones that would endure into the long term or extend over a large area. However, for some aspects there may be major residual impacts after all practicable mitigation options have been exhausted (i.e. ALARP has been applied). An example might be the visual impact of a development. It is then the function of regulators and stakeholders to weigh such negative factors against the positive factors such as employment, in coming to a decision on the Project.

Once the significance of the impact has been determined, it is important to qualify the **degree of confidence** in the assessment. Confidence in the prediction is associated with any uncertainties, for example, where information is insufficient to assess the impact. Degree of confidence can be expressed as low, medium or high.

Mitigation Measures and Residual Impacts

For activities with significant impacts, the EIA process is required to identify suitable and practical mitigation measures that can be implemented. The implementation of the mitigations is ensured through compliance with the EMP. After first assigning significance in the absence of mitigation, each impact is re-evaluated assuming the appropriate mitigation measure/s is/are effectively applied, and this results in a significance rating for the residual impact.

3.3 IDENTIFICATION OF MITIGATION MEASURES

For the identified significant impacts, the project team with the input of the client has identified suitable and practical mitigation measures that are implementable. Mitigation that can be incorporated into the project design in order to avoid or reduce the negative impacts or enhance the positive impacts have been defined and require final agreement with the client as these are likely to form the basis for the conditions of authorisation by DEA.

3.4 SPECIALIST STUDY METHODOLOGY

All specialists undertook an iterative process of assessment which significantly informed the proposed turbine layouts. An initial turbine layout, Layout Alternative 1, was assessed with results informing Layout Alternative 2 which incorporates inputs from the specialists.

3.4.1 Ecology and Biodiversity

A desk-based study was carried out to identify flora and fauna species likely to be found within the study area. A site visit was undertaken on 22 and 23 November 2010 to assess the flora and fauna (mammals, reptiles and amphibians) of the Roggeveld site. The site was walked and plant species encountered were recorded and where necessary, photographed for verification and documentation purposes. The various habitats were delineated on a satellite image of the site. Particular attention was given to potentially sensitive habitats or areas that appeared to be species-rich or harbour different or unique species, such as drainage areas and rocky ridges. All reptiles, amphibians and mammals observed were recorded as was any characteristic evidence of faunal presence or activity such as scat, diggings, burrows etc. Within certain habitats such as rocky outcrops, the area was actively searched for reptile species characteristic of these areas or species of

conservation concern which were identified beforehand as potentially occurring at the site.

Sensitivity maps of the study area were compiled based upon the findings of the site visit and available literature. The impact assessment phase involved the determination and evaluation of the nature of likely impacts of the development and recommendations on mitigation.

3.4.2 *Avifauna*

The study was undertaken in three phases, namely, scoping, site visit and impact assessment. During the scoping phase of the assessment, a literature review of bird and renewable energy facility interactions and bird species and habitats likely to occur in the study area was undertaken. This was followed by a site visit, which took place between 21 to 22 October 2010 to ground-truth predicted bird habitats and birds present, mainly by visiting as much of the inclusive area of the proposed development as possible, with an emphasis on sampling the avifauna in all of the primary habitats available. Additionally, the extent and direction of possible movements of birds within/through the site was estimated. The impact assessment phase involved the determination of the nature of likely impacts the development may have on birds and recommendations on mitigation.

3.4.3 *Bats*

A desktop review of publically available literature was undertaken during the initial phase of the assessment to understand bat and turbine interactions and the bat species and habitats likely to occur in the study area. A site visit took place on the night and day of 5 and 6 September 2010, respectively. During the day, the area was scanned for suitable roosting and foraging habitat. During the night, bat detectors and mist nets were set up at various points within the study area, in order to monitor actual bat activity. Finally the impact assessment phase involved the determination of the nature of likely impacts of the development and recommendations for mitigation.

3.4.4 *Noise*

The environmental noise impact investigation and assessment of the wind farm was conducted in accordance with Section 8 of SANS 10328. This procedure included determining the existing residual (ambient) levels of noise within the study area during a one-day site visit. As well as calculating the expected level of noise due to the wind turbines on the identified noise sensitive land. The impact assessment phase involved the determination and evaluation of the likely noise impacts of the development on noise receptors around the site and recommendations for mitigation.

3.4.5 *Visual*

The Roggeveld land parcels were plotted on a map and distance circles were overlaid in order to roughly determine the areas that would be visually

affected by the proposed wind farm. Using this visual radius map, a site visit was undertaken in September and October 2010. During the site visit a number of critical viewpoints were identified, particularly those relating to intersections of major roads, arterial and scenic routes, as well as settlements, including farmsteads. Panoramic photographs were taken from these viewpoints both for records and for use in determining the potential visibility of the wind farm from each viewpoint during the Visual Impact Assessment (VIA) stage of the EIA.

A viewshed map was prepared based on the proposed site layout and the proposed height of the turbines. This map provides a good indication of the areas which would be visually affected by the proposed facility. Photomontages were produced showing turbines superimposed on the panoramic photographs. These photomontages were used to assist with determining the nature of likely impacts of the development and recommendations on mitigation.

3.4.6 *Archaeology, Heritage and Palaeontology*

Archaeology

A desktop study was carried out of publicly available scientific publications to determine the archaeological history of the study area. In addition, an archaeological field survey was undertaken of the study area. Archaeological materials and structures were inventoried, with GPS positions, with approximate age and descriptions recorded as necessary. The impact assessment phase involved the determination of the nature of likely impacts of the development and recommendations on mitigation.

Heritage

Publications of the history of the study area were investigated and informed the specialist study. A heritage field survey was undertaken in order to identify existing heritage structures in the study area. These heritage structures were inventoried, with their GPS positions, age and descriptions recorded. The impact assessment phase involved the determination of the nature of likely impacts of the development and recommendations on mitigation.

Palaeontology

A desktop study was undertaken assessing the potentially fossiliferous rock units (groups, formations etc) represented within the study area, determined from geological maps. The known fossil heritage within each rock unit is inventoried from the published scientific literature, previous palaeontological impact studies in the same region, and the author's field experience. Additionally, a palaeontological field survey was undertaken of the study area. This data was then used to assess the palaeontological sensitivity of each rock unit to development (Provisional tabulations of palaeontological sensitivity of all formations in the Western, Eastern and Northern Cape have

already been compiled by Almond & Pether (2008). Finally the impact assessment phase involved the determination of the nature of likely impacts of the development and recommendations on mitigation.

3.4.7 *Socio-economic*

The socio-economic specialist study was undertaken by an ERM social specialist, Kerryn McKune Desai. The study began with the compilation of a baseline description. The baseline description was derived from a range of secondary data (including but not limited to, census data, existing reports, development plans other strategic planning documents) and primary data collection. The primary data used for the baseline was based on information provided by the directly-affected landowners and issues raised through the public consultation process.

The impact assessment phase incorporated the identification and assessment of socio-economic impacts (direct, indirect and cumulative) that may result from the construction and operation phases of the project. Mitigation measures that address the local context and needs were recommended as the final phase of the study.

3.5 *ASSUMPTIONS AND LIMITATIONS*

EIA is a process that aims to identify and anticipate possible impacts based on past and present baseline information. As the EIR deals with the future there is, inevitably, always some uncertainty about what will actually happen. Impact predictions have been made based on field surveys and with the best data, methods and scientific knowledge available at this time. However, some uncertainties could not be entirely resolved. Where significant uncertainty remains in the impact assessment, this is acknowledged and the level of uncertainty is provided as the degree of confidence.

In line with best practice, this EIR has adopted a precautionary approach to the identification and assessment of impacts. Where it has not been possible to make direct predictions of the likely level of impact, limits on the maximum likely impact have been reported and the design and implementation of the project (including the use of appropriate mitigation measures) will ensure that these are not exceeded. Where the magnitude of impacts cannot be predicted with certainty, the team of specialists have used professional experience and available scientific research from wind farms worldwide to judge whether a significant impact is likely to occur or not. Throughout the assessment this conservative approach has been adopted to the allocation of significance.

3.5.1 *Gaps and Uncertainties*

Inevitably knowledge gaps remain. For instance, there is an incomplete understanding of cumulative impacts as it is not known how many of the proposed turbines in the vicinity of Roggeveld will be granted authorisation.

Gaps in Project Description

- Turbine locations- the assessment is based on a preferred and final layout (Layout 2) based on revision of earlier layouts to accommodate environmental sensitivities. The final layout has been confirmed, however precise turbine locations may be microsited to allow for geotechnical constraints, more detailed site assessments by ecologist and heritage specialists, and that this will seek to ensure that all locations remain out of areas of very high sensitivity as defined by this study and that the specialists will sign off on revised positions.
- The location and size of possible borrow pit(s) and on-site batching plants within the Roggeveld site.
- Extent of blasting required for the construction of the development.

Gaps in Baseline Information

- Limited fieldwork and understanding of bird and bat abundance and movement patterns across the area.
- Limited understanding of the locations of bat roosting caves and migration routes in South Africa.

Gaps in Understanding of Impacts

- It should be noted that predictions are based on limited fieldwork and understanding of bird and bat abundance and movement patterns across the area, and therefore in support of the precautionary principle and international best practice, six to 12 months of preconstruction monitoring is recommended to confirm predictions and identify additional mitigation measures.
- The evidence of curtailment as an effective mitigation measure of reducing impacts on birds and bats.
- As the size and location of possible borrow pit(s) and batching plants are not as yet understood, possible impacts due to these activities could not be assessed.