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1 INTRODUCTION

The CSIR has been appointed by Electrawinds NV as the independent environmental assessment practitioners to undertake a basic assessment (BA) of the proposed wind turbine and anemometer mast. CSIR has, in turn, appointed Henry Holland of map (this); to conduct a visual impact assessment (VIA) of the proposed development.

This VIA is based on guidelines for visual assessment specialist studies as set out by South Africa's Western Cape Department of Environmental Affairs and Development Planning (DEA&DP) (Oberholzer 2005) as well as guidelines provided by the Landscape Institute of the UK (GLVIA 2002). The DEA&DP guideline recommends that a visual impact assessment consider the following specific concepts (from Oberholzer 2005):

- An awareness that 'visual' implies the full range of visual, aesthetic, cultural and spiritual aspects of the environment that contribute to the area's sense of place.
- The considerations of both the natural and cultural landscape, and their interrelatedness.
- The identification of all scenic resources, protected areas and sites of special interest, together with their relative importance in the region.
- An understanding of the landscape processes, including geological, vegetation and settlement patterns, which give the landscape its particular character or scenic attributes.
- The need to include both quantitative criteria, such as 'visibility', and qualitative criteria, such as aesthetic value or sense of place.
- The need to include visual input as an integral part of the project planning and design process, so that the findings and recommended mitigation measures can inform the final design, and hopefully the quality of the project.
- The need to determine the value of visual/aesthetic resources through public involvement.

1.1 SCOPE OF STUDY

1.1.1 *Terms of Reference*

The visual input to provide a rapid visual assessment (at the level of detail appropriate for a Basic Assessment) that presents and evaluates the visual impact of the turbines from the various viewsheds in the vicinity, including the N2 national road running along the front of the Coega IDZ under different operating conditions that highlight the potential impacts on sensitive visual receptors. Computer-based simulations must be generated of the wind monitoring mast and test turbine in the landscape, for the most important view points.

In order to provide this input, the following broad ToRs have been specified for the specialist:

- Identify viewpoints;
- Photograph existing views from selected viewpoints (attend a site visit);
- Super-impose the proposed single demo turbine (referred to as the 'test turbine' above) onto landscape, properly scaled, with views shown from 2 to 4 viewpoints.
- Consider the impacts for both day and night and for different weather conditions as appropriate;
- Assess the visual impacts accordingly and provide mitigation where necessary;
- Provide results as a written visual input to the BA report.

1.1.2 Visual Triggers

(Oberholzer 2005) identifies visual triggers which are used to determine the approach and scope of an impact study. The following triggers, related to the receiving environment, are potentially applicable to this project:

- Areas with protection status, such as national parks or nature reserves (e.g. Addo Elephant National Park (AENP));
- Areas with important vistas or scenic corridors (AENP);
- Areas with visually prominent ridge lines or skylines (the height of the turbine will project above the skyline in most views);
- Areas of important tourism or recreational value (Port Elizabeth and AENP).

Triggers related to the nature of the project:

- A significant change to the fabric and character of the area (due to the height and potential visibility of the turbine);
- Possible visual intrusion in the landscape.

1.1.3 Information Base

- Documentation supplied by Electrawinds;
- ToR for the visual specialist;
- Digital spatial topocadastral data at 1:50 000 scale from the Surveyor General: Surveys and Mapping;
- Wind turbine model by Pete Young hosted in the Google 3D Warehouse (<http://sketchup.google.com/3dwarehouse/details?mid=c036208d537d6f98967f3aa7f40c33&prevstart=0>).
- Google Earth software and data.
- Photo of a Siemens SWT-2.3-101 Turbine at <http://newenergyandfuel.com/wp-content/uploads/2009/03/siemans-low-wind-speed-turbine.jpg> (Figure 1.1)
- IUCN database of protected areas (<http://www.wdpa.org/Download.aspx>)



Figure 1.1 An image of a Siemens 2.3MW wind turbine used in the photomontage process.

1.1.4 Assumptions and Limitations

Spatial data used for visibility analysis originate from various sources and scales. Inaccuracy and errors are therefore inevitable. Every effort was made to minimize their effect and where relevant these will be highlighted in the report.

Calculation of the viewsheds does not take into account the potential screening effect of vegetation and buildings. Due to the size and height of the wind turbine, and the relative low thicket cover in the region, the screening potential of vegetation is likely to be minimal over most distances.

The photomontage technique depends on the ability of Google Earth and Google Sketchup Pro to render virtual models of structures accurately in their correct scale/distance relationship. The author has been unable to find documentation concerning rendering accuracy for Google Earth. Comparisons with photos of wind farms in Europe suggest a reasonable accuracy (using similar distance/size ratios).

1.2 METHODOLOGY

1.2.1 Site Visit and Photographic Survey

The site visit (4 August 2009) provided an opportunity to take photos from a number of viewpoints for use in the photomontage process.

1.2.2 Visibility Analysis

A Geographic Information System (GIS) was used to create a digital elevation model (DEM) from which a viewshed for the wind turbine could be calculated.

1.2.3 Photomontage

A technique similar to that described in Zack (2006) was employed to produce the photomontage images for the report. A number of sites were selected from which photos were taken such that the proposed wind turbine would be prominent in the view. Using metadata recorded by the camera and GPS readings scenes portrayed in the photos were reconstructed in Google Earth as accurately as possible. A digital 3D model of the wind turbine¹ was placed in the correct position in the virtual landscape and could then be used as a guide to the size and position of the wind turbine in the photos. A photomontage was then created by super-imposing an image of a wind turbine (see Figure 1.1) at the correct scale and position in the photos.

¹ According to the author: 'Roughly based on Suzlon models. 80m ground to nose cone, 42m blade length.' The dimensions are similar to that of the Siemens model that is proposed for the site.

2 PROJECT DESCRIPTION

2.1 STUDY AREA

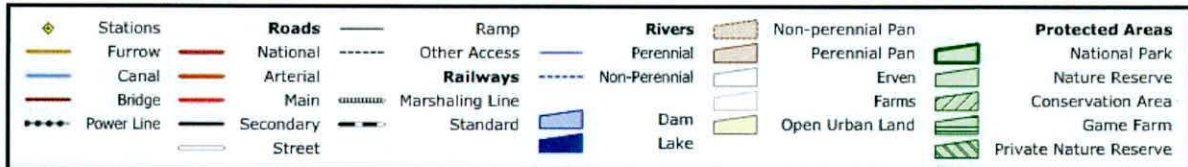


Figure 2.1 Legend for topocadastral data on maps.

Refer to Figure 2.1 for a key to topocadastral data on in-line maps in this document.

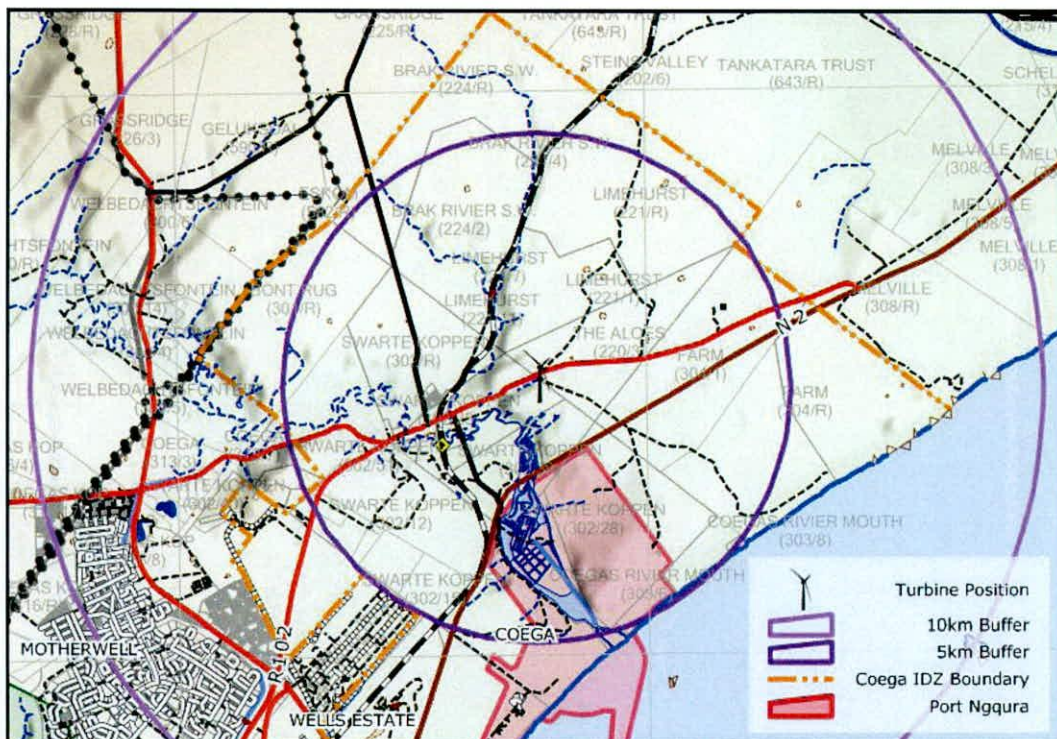


Figure 2.2 Wind turbine position (centre of map).
Purple circles indicate 5km and 10km distances from the turbine.

The wind (anemometer) mast and test turbine will be located on a ridge inside the Coega Industrial Development Zone (IDZ) (Figure 2.2).

2.2 PROJECT COMPONENTS AND ACTIVITIES

The components of the project which are most relevant to this report are:

- A wind monitoring mast; and
- A single 'test' wind turbine with a total height (including rotor) of 120m.

The wind turbine will have a much larger effect on the landscape and on viewers than the monitoring mast due to its size, the solid tower (as opposed to the lattice structure of the monitoring mast) and the movement of the rotating blades which will attract attention to the turbine. The turbine and wind monitoring mast will be located close to each other and the turbine has therefore been used in all modelling and analyses in order to simplify the process.

3 ASSESSMENT AND MITIGATION OF IMPACTS

The assessment and mitigation of impacts is conducted in the following steps:

- Identification of visual impact criteria (key theoretical concepts).
- Conducting a visibility analysis.
- Assessment of impacts of the project on the landscape and on receptors (viewers) taking into consideration factors such as sensitive viewers and viewpoints, visual exposure and visual intrusion.
- Identification of management action (mitigation measures).

3.1 VISUAL IMPACT CONCEPTS AND ASSESSMENT CRITERIA

3.1.1 *Visual assessment criteria used in assessing magnitude and significance*

The potential visual impact of the proposed turbine (and wind monitoring mast) is assessed using a number of criteria which provide the means to measure the magnitude and determine the significance of the potential impact (Oberholzer 2005). The **visibility** (Section 0) of the project is an indication of where in the region the development will potentially be visible from. The rating is based on viewshed size only and is an indication of how much of a region will potentially be affected visually by the development. A high visibility rating does not necessarily signify a high visual impact, although it can if the region is densely populated with sensitive visual receptors. **Viewer (or visual receptor) sensitivity** (Section 3.1.4) is a measure of how sensitive potential viewers of the development are to changes in their views. Visual receptors are identified by looking at the development viewshed, and include scenic viewpoints, residents, motorists and recreational users of facilities within the viewshed. A large number of highly sensitive visual receptors can be a predictor of a high **intensity/magnitude** visual impact although their distance from the development (measured as **visual exposure** – Section 3.1.5)) and the current composition of their views (measured as **visual intrusion** – Section 3.1.6) will have an influence on the significance of the impact.

Refer to the legend in Figure 2.1 for topocadastral features indicated on in-line maps in this section.

3.1.2 Impact Rating Methodology

The following methodology was applied for rating the potential visual impacts:

Nature of impact - this reviews the type of effect that a proposed activity will have on the environment and should include "what will be affected and how?".

Extent - this should indicate whether the impact will be local and limited to the immediate area of development (the site); limited to within 5km of the development; or whether the impact may be realised regionally, nationally or even internationally.

Duration - this should review the lifetime of the impact, as being short term (0 - 5 years), medium (5 - 15 years), long term (>15 years but where the impacts will cease after the operation of the site), or permanent.

Intensity - here it should be established whether the impact is destructive or innocuous and should be described as either low (where no environmental functions and processes are affected), medium (where the environment continues to function but in a modified manner) or high (where environmental functions and processes are altered such that they temporarily or permanently cease).

Probability - this considers the likelihood of the impact occurring and should be described as improbable (low likelihood), probable (distinct possibility), highly probable (most likely) or definite (impact will occur regardless of prevention measures).

The status of the impacts and degree of confidence with respect to the assessment of the significance must be stated as follows:

Status of the impact: A description as to whether the impact will be positive (a benefit), negative (a cost), or neutral.

Degree of confidence in predictions: The degree of confidence in the predictions, based on the availability of information and specialist knowledge. This should be assessed as high, medium or low.

Based on the above considerations, the specialist must provide an overall evaluation of the significance of the potential impact, which should be described as follows:

Low: Where the impact will not have an influence on the decision or require to be significantly accommodated in the project design

Medium: Where it could have an influence on the environment which will require modification of the project design or alternative mitigation;

High: Where it could have a 'no-go' implication for the project unless mitigation or re-design is practically achievable.

3.1.3 Visibility

Visibility of Project	<p>The geographic area from which the project will be visible, or view catchment area. (The actual zone of visual influence of the project may be smaller because of screening by existing trees and buildings). This also relates to the number of receptors affected (Oberholzer 2005).</p> <p><i>High visibility</i> - visible from a large area (e.g. several square kilometres).</p> <p><i>Moderate visibility</i> – visible from an intermediate area (e.g. several hectares).</p> <p><i>Low visibility</i> – visible from a small area around the project site.</p>
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The visibility of the turbine is likely to be high due to its height. Movement of the rotating blades will also attract attention to the turbine. The calculated view catchment area is large as expected and there are very few areas which won't have some view of the turbine (Figure 3.1). The topography in the region does little to hide the turbine. It is also unlikely that the local thicket vegetation will provide screening for the turbine unless the viewer is close to the thicket and most of the horizon is obscured by it.

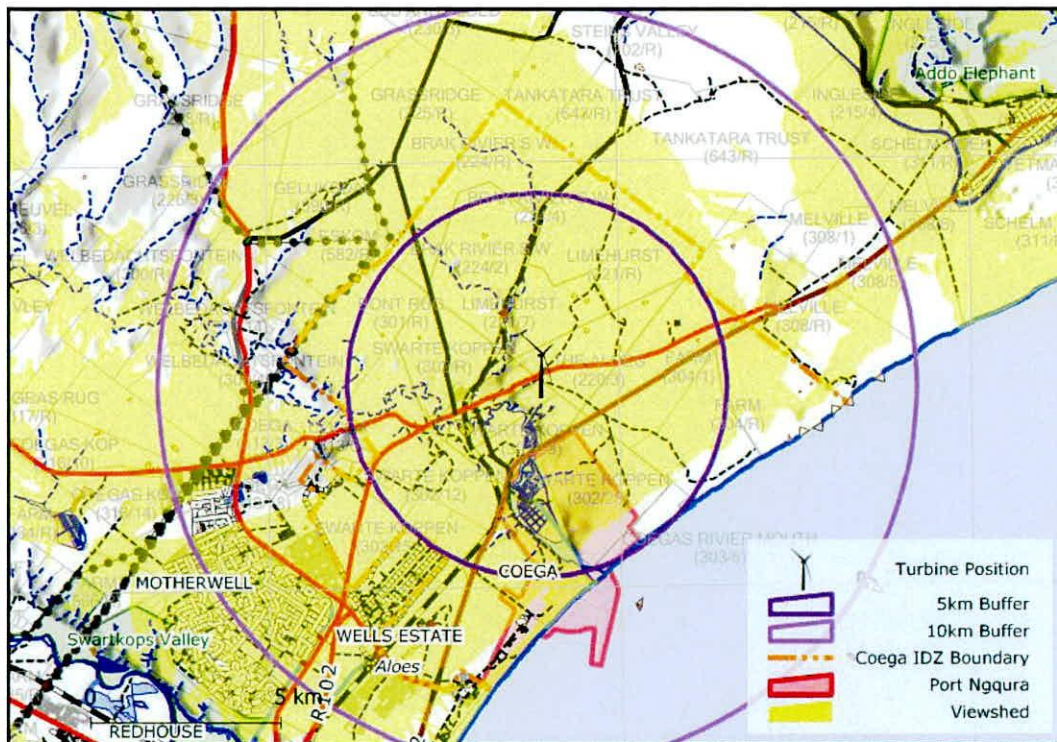


Figure 3.1 Viewshed of the proposed wind turbine
 (yellow colour indicates areas from which the turbine will be visible).

3.1.4 Sensitive Viewers and Viewpoints

Viewer sensitivity	The assessment of the receptivity of viewer groups to the visible landscape elements and visual character and their perception of visual quality and value. The sensitivity of viewer groups depends on their activity and awareness within the affected landscape, their preferences, preconceptions and their opinions.
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A rating system provided by the Landscape Institute of the United Kingdom is used to determine viewer sensitivity:

	Definition (GLVIA 2002)
Exceptional	Views from major tourist or recreational attractions or viewpoints promoted for or related to appreciation of the landscape, or from important landscape features.
High	Users of all outdoor recreational facilities including public and local roads or tourist routes whose attention may be focussed on the landscape; Communities where the development results in changes in the landscape setting or valued views enjoyed by the community; Residents with views affected by the development.
Moderate	People engaged in outdoor sport or recreation (other than appreciation of the landscape).
Low	People at their place of work or focussed on other work or activity; Views from urbanised areas, commercial buildings or industrial zones; People travelling through or passing the affected landscape on transport routes
Negligible (uncommon)	Views from heavily industrialised or blighted areas.

Viewers will consist mostly of people working in the **Coega IDZ** and **motorists** driving along the N2 and other roads in the area. **Tourists**, especially international tourists, will be among these motorists. Although the nearest boundary of the **AENP** is approximately 15km away from the study site it is possible that views from inside the park will include the turbine against the skyline. There are a couple of other protected areas in the form of game farms and private nature reserves, but these are also further than 10km away from the turbine site (Table). **Residents** of Motherwell, Wells Estate and Colchester will potentially see the turbine.

Motorists are regarded as *low* sensitivity viewers since their views are continuously changing as they cannot focus on the landscape for long periods. Similarly, people working in the Coega IDZ will have a *low* sensitivity to changes in their views since they are not likely to focus on the landscape for long. Tourists will have *high to exceptional* sensitivity to views of the landscape since they will have a particular interest in the local landscape. However, they will not necessarily be sensitive to changes in the landscape. Tourists, in this case, will mostly be motorists driving along the N2 or main roads leading towards AENP. Residents of urban areas and farms surrounding the IDZ are regarded as *highly* sensitive to changes in their views. Scenic viewpoints in the AENP and other protected areas are seen as *highly to exceptionally* sensitive visual receptors.

Table 3-1 Protected areas close to the wind farm site (IUCN 2009 data)

Protected Area	Type	Distance from Turbine
Addo	National Park	11.7km
Addo	National Park	20.9km
Addo	National Park	17.0km
Addo	National Park	23.4km
Grassridge	Private Nature Reserve	14.3km
Springs	Local Authority Nature Reserve	21.1km
Swartkops Valley	Local Authority Nature Reserve	11.2km
The Penhurst Rly State Reserve	Conservation Area	16.8km
Tregathlyn	Game Farm	12.6km

3.1.5 Visual Exposure

Visual exposure	<p>Visual exposure refers to the relative Visibility of a project or feature in the landscape (Oberholzer, 2005). Exposure and visual impact tend to diminish exponentially with distance. The exposure is classified as follows:</p> <p><i>High exposure</i> – dominant or clearly noticeable;</p> <p><i>Moderate exposure</i> – recognisable to the viewer;</p> <p><i>Low exposure</i> – not particularly noticeable to the viewer</p>
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High visual exposure will be confined to the Coega IDZ, while Motherwell and the Wells Estate will experience moderate visual exposure to the turbine (Figure 3.2). Even though the turbine will be visible beyond 5km, it is unlikely to be particularly noticeable to the viewers. Viewers in the AENP and Colchester will potentially have views where the turbine will project above the horizon, although it will make up a very small part of the view. Motorists driving along the N2 will experience high visual exposure to the turbine from approximately 2.5km from the turbine.

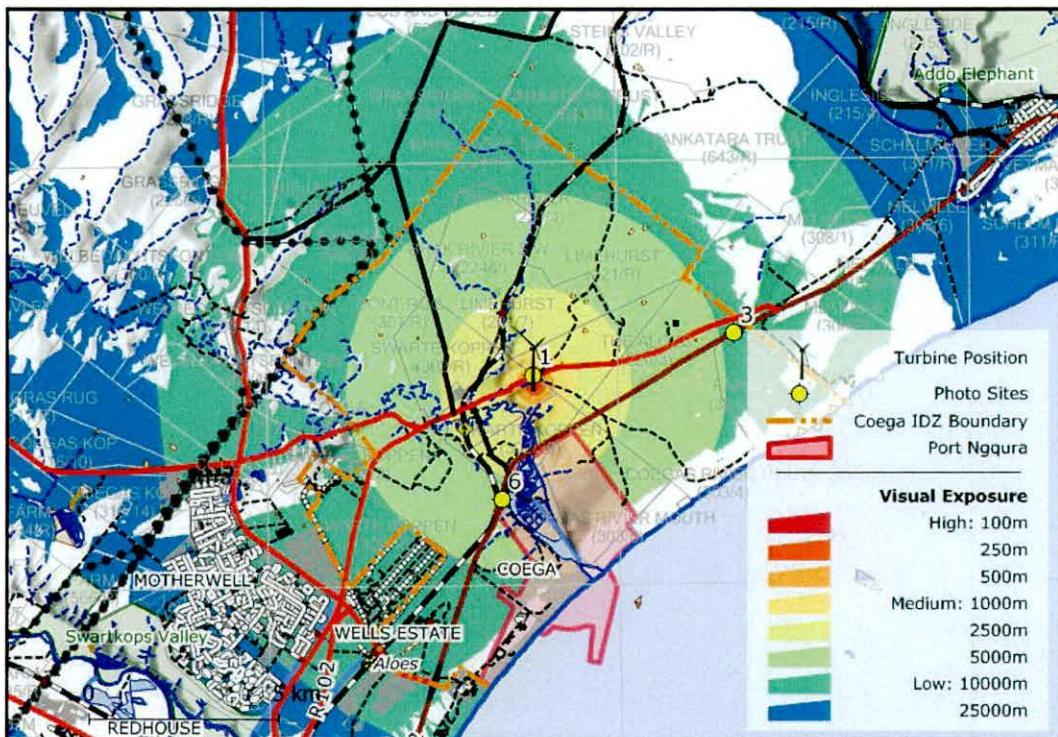


Figure 3.2 Visual exposure of the turbine. The colour range reflects the exponential nature of visual exposure – visual impact diminishes exponentially with distance.

3.1.6 Visual Intrusion

Visual intrusion	Visual intrusion indicates the level of compatibility or congruence of the project with the particular qualities of the area – its <i>sense of place</i> . This is related to the idea of context and maintaining the integrity of the landscape (Oberholzer 2005). It can be ranked as follows: High – results in a noticeable change or is discordant with the surroundings; Moderate – partially fits into the surroundings, but is clearly noticeable; Low – minimal change or blends in well with the surroundings.
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Sense of place is defined by (Oberholzer 2005) as: 'The unique quality or character of a place...[It] relates to uniqueness, distinctiveness or strong identity.' It describes the distinct quality of an area that makes it memorable to the observer.

The development site is well within the Coega IDZ and will be a part of an industrial landscape. Medium to high visual exposure of the wind turbine will be confined to the IDZ. The site is also near a large substation and several high capacity power lines cross the IDZ nearby (Figure 3.3). However, the height and size of the turbine (and the rest of the proposed wind farm) will dwarf these structures in most views. There are large cranes at Port Ngqura which compare in size and visibility with that of the wind turbine (Figure 3.4). There are many developments underway in the IDZ and at the Port, and views of the wind turbine will include many of these developments. Similarly, views from the north (AENP) will have Port Elizabeth and its various suburbs as backdrop.



Figure 3.3 Substation just north of the wind turbine site (approximately 500m away).



Figure 3.4 Large cranes at Port Ngqura visible from 15km away. The wind turbine will also be in this view and will be comparable in size.

3.1.7 Photomontage Results

Three photo sites (out of six) were chosen for the photomontage process. Figure 3.2 shows the localities of these three sites.

SITE 1

This site is within 300m from the turbine site on the R102 road between Colchester and Motherwell. Here the wind turbine will fill the view and will overshadow all other landscape features (Figures 3.5 and 3.6).



Figure 3.5 Photomontage of view from Photo Site 1 south towards the proposed turbine. The turbine fits only partially into the photo due to its size at this distance. The Google Earth image provides a view on the whole turbine.



Figure 3.6 Google Earth image from Photo Site 1 shows the whole turbine. The view is from slightly higher than that of the photo in order to fit the turbine into the picture.

SITE 3

This site is on the N2 just over 5km north-east of the turbine site. Although views of the turbine will see it project above the horizon/skyline, the wind turbine constitutes a small part of the view. It should be noted that the turbine is still an enormous man-made feature in the landscape (e.g. when compared with the power lines and pylons in the figure).



Figure 3.7 Photomontage of view from Photo Site 3 along the N2. The turbine is approximately 5km away.

SITE 6

The view from the southern bank of the Coega River shows the turbine project above the flat terrace along the northern bank. There is nothing along this bank that compares in size/height with the wind turbine.



Figure 3.8 Photomontage of the view north from Photo Site 6. The wind turbine is a prominent feature on the terrace above the Coega River.

Table 3-2 Summary of visual impact criteria

Criteria	Impact
Viewer Sensitivity	AENP Viewpoints – Highly sensitive; Tourists – Highly sensitive viewers; Motorists – Low sensitivity viewers; Residents – Highly sensitive viewers
Visibility of Development	High
Visual Exposure	Medium to High within the IDZ
Visual Intrusion	Medium due to the surrounding industrial landscape.

3.2 SIGNIFICANCE OF VISUAL IMPACT ON VIEWERS

Visual impacts

Changes to the visual character of available views resulting from the development that include: obstruction of existing views; removal of screening elements thereby exposing viewers to unsightly views; the introduction of new elements into the viewshed experienced by visual receptors and intrusion of foreign elements into the viewshed of landscape features thereby detracting from the visual amenity of the area

The visual impact of the wind turbine is expected to be considerably higher than that of the wind monitoring mast due to its size, the type of structure and construction, and the novelty aspect of wind turbines in the South African landscapes. This assessment will therefore concentrate on the potential effect of the wind turbine.

3.2.1 Construction Phase

The construction phase is short (less than a year) but will be highly visible. The turbine components are very big (e.g. a blade is 42m long and is transported in one piece) and their transport is likely to cause some disruption of traffic on the N2 and R102. A large crane will be required to lift these components into place. Clearing of vegetation for an access road and laydown areas will be required, which are likely to create areas of high contrast within the dense thicket in the area.

The extent of the impact will be **regional** due to the height of the construction and the size of the components and equipment. The duration will be very **short**. Visual exposure is high for a large surrounding area although visual intrusion will be relatively low since the construction will take place among many other developments and construction activities within an industrial area. Impact intensity is therefore likely to be **medium**. Due to the novelty aspect of the wind turbine and its size, the probability of a visual impact occurring during the construction phase is **definite**. The status of the impact is **negative** since the visual impact of construction sites are normally seen as negative due to the impression of untidiness and the sense of incompleteness. The significance of the impact is therefore likely to be **medium** (rather than high) due to the short duration and medium intensity.

3.2.2 Operational Phase

Impact extent will be **regional** since the turbine will be visible and exposed against the skyline over long distances (more than 5km). Duration of the impact will be **long term** since turbines normally have a lifetime of more than 15 years (Martinez *et al.* 2008). The intensity of the impact and the probability of it occurring will differ for different sensitive visual receptors and will be discussed below.

SCENIC VIEWPOINTS

Views promoted for their scenic value occur mostly within protected areas surrounding the site, such as in the AENP. Visual exposure to the development for these protected areas is low because of the distances involved. Unlike most other developments, a wind turbine of this size will be visible and discernable for distances beyond 10km because it is likely to project above the horizon (especially for views towards the coast) and because the movement of the rotating blades attracts attention. However, it is likely to constitute a very small part of the view at these distances. The visual intrusion will be low since most views will include other structures and developments in the industrial zone, and the city of Port Elizabeth and its neighbouring urban and industrial areas will form a backdrop to most views. The intensity of the visual impact on scenic viewpoints in the region is therefore expected to be **low**. The probability of the impact occurring is **improbable** due to the distances between the turbine site and the protected areas. A single turbine at those distances is unlikely to make an impact. The

status of the impact can be negative since views in a nature reserve are normally prized for, among other things, the pristine quality of the landscape (i.e. the lack of man-made developments). There is also a positive aspect to the impact in that the wind turbine can be seen as a symbol of environmentally friendly and sustainable energy. The significance of the impact will be **low to medium** (and not high) due to the low expected intensity and the low probability of it occurring.

TOURISTS

Tourists driving along the N2 or R102 will experience high visual exposure to the development when passing close to it. Visual intrusion will also be high due to the uniqueness of the development in the area, and its size. However, most international tourists are likely to be accustomed to wind farms. Additionally, views from these roads in the IDZ are not prized for their scenic value. In light of this, it is expected that the intensity of the visual impact on tourists will be **moderate**. The probability of it occurring is **definite** due to the proximity of the roads to the development. The status of the impact will most likely be **positive** for international tourists as the wind turbine will provide evidence that South Africa is actively pursuing less environmentally harmful energy solutions. The significance of the impact will therefore be **high** due to the high criteria values and the sensitivity of the viewers to the landscape.

RESIDENTS

Visual exposure and intrusion are low for residents due to their distance from the development. Impact intensity will therefore be **low**. The probability of the impact occurring is **probable** since they are closer to the development site than the protected areas. The significance of the impact will be **low to moderate** due to the low intensity. The status of the impact will be positive for some residents and negative for others.

MOTORISTS

Motorists are low sensitivity visual receptors and will only be exposed to the development for short periods. Visual exposure will be high for a short period but will rapidly decrease with distance. Visual intrusion will be low as there are many other developments in the area, and once the novelty of wind farms wears off, the sight of a wind farm in an industrial zone will not be unexpected. Overall then the impact intensity for motorists will be **low**. Its probability of occurring will be **definite** due to the size of the turbine and the proximity of the main roads to the site. The status of the impact will depend on the motorist's opinion of wind farms. The significance of the impact will be **low** since the intensity of the impact on motorists is expected to be low.

3.2.3 Lighting Impact

Civil aviation regulations require a single red, flashing light for the turbine, as well as a light for the monitoring mast. It is unlikely that these two lights will add much to the existing light pollution of the area.

3.3 MITIGATION MEASURES

Mitigation	The purpose of mitigation is to avoid, reduce and where possible remedy or offset any significant negative effects on the environment arising from the proposed development. (GLVIA 2002)
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3.3.1 Construction

New road construction should be minimised by using existing roads where possible.

The contractor should maintain good housekeeping on site to avoid litter and minimise waste as per the relevant CDC specifications.

Lighting at night of the stockyards and other areas should be minimal without compromising security and safety, and should be designed to prevent light pollution.

Minimise clearance of vegetation for laydown areas and stockyards. Rehabilitation of cleared areas should start as soon as possible.

Erosion risks should be minimised as erosion scarring creates strong contrast in the dense thicket vegetation and can be seen from long distances.

3.3.2 Operational Phase

Mitigation options are limited due to the height of the turbine. It has been shown that uncluttered sites are preferred for wind farms (Gipe 1995). In view of this the following mitigation measures may enhance the positive visual aspects of the development:

- Siting of the turbine should be far away from power lines and similar structures. The current site is surrounded by power lines and there is a substation on the opposite side of the R102 from the site, but there was a suggestion during the site visit that the turbine be located closer to the substation. This is not recommended – the current site is preferred.
- The power line connecting the turbine with the grid should be buried.
- Maintenance of the turbine is important. A spinning rotor is perceived as being useful. If a rotor is stationary when the wind is blowing it is seen as not fulfilling its purpose and a negative impression is created (Gipe 1995).
- Signs near wind turbines should be avoided unless they serve to inform the public about wind turbines and their function. Advertising billboards should be avoided. CDC guidelines for signage should be followed.
- According to the Aviation Act, 1962, Thirteenth Amendment of the Civil Aviation Regulations, 1997: *“Wind turbines shall be painted bright white to provide maximum daytime conspicuousness. The colours grey, blue and darker shades of white should be avoided altogether. If such colours have been used, the wind turbines shall be supplemented with daytime lighting, as required.”*
- Lighting should be designed to minimise light pollution without compromising safety. Investigate using motion sensitive lights for security lighting. Turbines are to be lit according to Civil Aviation regulations.

SECTION F: APPENDICES
DRAFT BASIC ASSESSMENT REPORT FOR ELECTRAWINDS PROJECT AT COEGA

Table 3-3 Visual impact assessment of wind turbine on sensitive viewers.

Nature of Impact	Status (Negative or Positive)	Extent	Duration	Intensity	Probability	Significance (no mitigation)	Mitigation/Management Actions	Significance (with mitigation)	Confidence level
CONSTRUCTION PHASE									
Intrusion of large construction site on views of sensitive viewers.	Negative	Regional due to the height and visibility of the structure.	Very Short – construction time will be less than a year.	Medium since visual intrusion on sensitive views will be low.	Definite	Medium due to short duration and medium intensity.	Normal mitigation measure for construction sites – see main report.	Medium	High
Operational Phase									
Intrusion of very tall and large structure into scenic views from protected areas.	It's not clear whether the impact will be positive or negative. It is a man-made structure, but it symbolises environmentally friendly energy.	Regional due to the height and size of the structure.	Long term	Low . Visual exposure and intrusion values are low.	Improbable due to the distances involved.	Low	Mitigation measures described in the report will enhance the positive aspects of the development.	Low	High
Intrusion of a very tall and large structure into views of tourists (using main roads in the vicinity).	Positive	Regional	Long term	Low to Moderate due to high visual exposure close to the site and low visual intrusion.	Definite	Medium to High due to the high criteria values and the sensitivity of viewers.	Mitigation measures described in the report will enhance the positive aspects of the development.	Medium to High	High
Intrusion of a very tall and large structure into views of residents in neighbouring regions.	Most residents will have either a positive or negative opinion on the aesthetics of wind farms.	Regional	Long term	Low due to low visual exposure and intrusion.	Probable	Low to Medium	Mitigation measures described in the report will enhance the positive aspects of the development.	Low to Medium	High
Intrusion of a very tall and large	Will depend on the motorist's opinion	Regional – the wind	Long term	Low – visual intrusion is low	Definite	Low		Low	High

SECTION F: APPENDICES
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Nature of Impact	Status (Negative or Positive)	Extent	Duration	Intensity	Probability	Significance (no mitigation)	Mitigation/Management Actions	Significance (with mitigation)	Confidence level
structure into views of motorists using main roads in the area (e.g. N2 and R102)	on wind farms.	turbine will be discernable from a long distance.		and high exposure is for only a short period. Motorists are seen as low sensitivity viewers.					

4 CONCLUSIONS AND RECOMMENDATIONS

Wind turbines are enormous and highly visible structures. They are normally placed in highly visible areas, such as ridges and hills, where appropriate wind conditions exist. It is also still true that there are not many examples of wind turbines in the South African landscape. The intensity of the visual impact of a wind turbine at Coega is therefore likely to be high, initially. There are, however, a number of factors which lowers the significance of the impact, such as:

- It is located in a designated industrial zone with most of the high visual exposure within the zone;
- The landscape of the IDZ is changing rapidly as new developments are introduced into the area;
- Most sensitive visual receptors are further than 10km away from the site.
- Sensitive views from protected areas will include many other developments within the IDZ, as well as urban and industrial developments in Port Elizabeth, and the wind turbine will constitute only a small part of that view.

Wind turbines and wind farms are symbols of 'clean energy' and are often seen as a positive addition to the landscape. This is obviously not the case for all viewers, but foreign tourists are likely to be accustomed to wind farms in landscapes, especially tourists from the USA and Europe where wind farms are common features of landscapes.

REFERENCES

- Civil Aviation Authority (CAA), SA-CATS AH 139.01.33: *Obstacle Limitations and Markings Outside Aerodrome or Heliport (Marking of Obstacles) and Aviation Act, 1962 (Act No. 74 of 1962) Thirteenth Amendment of the Civil Aviations Regulations (CAR's) 1997*
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APPENDIX E

Public Consultation

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E.1 E-NOTICE BOARD AT COEGA OFFICES

Copy of the electronic notice placed at the reception of the Coega IDZ offices

PROPOSED WIND MONITORING MAST AND TEST WIND TURBINE IN THE COEGA INDUSTRIAL DEVELOPMENT ZONE

NOTICE OF BASIC ASSESSMENT PROCESS

Notice is given in terms of Regulation 56 of the Environmental Impact Regulations published in Government Notice R.385 in Government Gazette No 28753 of 21 April 2006, under Section 24(5) of the National Environmental Management Act, 1998 (Act No 107 of 1998), as amended in 2006, that Electrawinds is proposing the installation and operation of a wind monitoring mast and test wind turbine in Cluster H of the Coega Industrial Development Zone (Coega IDZ), Nelson Mandela Bay Municipality.

In terms of the NEMA EIA Regulations (Act 107 of 1998) published in Government Gazette 28753 on 21 April 2006, the need for a Basic Assessment is triggered by the inclusion of activities listed in GN R 386: Activity 14. An application for environmental authorisation to undertake the listed activity will be submitted to the National Department of Water Affairs and Environment (DWEA).

14. *The construction of masts of any material or type and of any height, including those used for telecommunication broadcasting and radio transmission, but excluding –*

(a) masts of 15 metres and lower exclusively used

(i) by radio amateurs; or

(ii) for lighting purposes

(b) flag poles; and

(c) lightning conductor poles.

Electrawinds have appointed the CSIR as the independent Environmental Assessment Practitioners to manage the Basic Assessment application and Public Process Consultants will undertake the Public Participation component of the Assessment. The application will require environmental authorization from the Department of Water and Environmental Affairs (DWEA).

In order to obtain further information on the project or to register your interest, contact:-
Sandy Wren
Public Process Consultants
PO Box 27688, Greenacres, 6057
Phone 041-374 8426 / Fax 041-373 2002 / Email sandy@publicprocess.co.za

SECTION F: APPENDICES
DRAFT BASIC ASSESSMENT REPORT FOR ELECTRAWINDS PROJECT AT COEGA

E.2 REGISTER OF IA&PS FOR THE ELECTRAWINDS BASIC ASSESSMENT PROCESS

Title	First Name	Last Name	Organisation	Capacity	Address	Town	Code	Telephone	Fax	Cellphone	email
Mr	Jeff	Govender	DEDEA	Regional Manager	Pvt Bag X5001	Greenacres	6057	041 508 5811	041-5851958	071 674 9710	dayalan.govender@deaet.ecape.gov.za
Mr	Andries	Struwig	DEDEA	Asst. Director: IEM	Pvt Bag X5001	Greenacres	6057	041 508 5844	041 585 1958	079 503 1762	andries.struwig@deaet.ecape.gov.za
Mr	Prince	Radzuma	DEAT/MCM		Pvt Bag X2	Roggebay	8012	021 402 3689	021 402 3009	072 702 1756	pradzuma@deat.gov.za
Ms	Linah	Tshikororo	DEAT/MCM		Pvt Bag X23	Roggebay	8012	021 402 3044	021 402 3009		ttshikor@deat.gov.za
Mr	John	Geeringh	DWEA		Pvt Bag X447	Pretoria	0001	012 310 3491	012 320 7539	083-6327663	jgeeringh@deat.gov.za
Ms	Lené	Grobbelaar	DWEA	Assistant Director: Parastatals	Pvt Bag X447	Pretoria	0001	(012) 310-3087	(012) 320-7539		lgrobbelaar@deat.gov.za
Mr	Luvuyo	Mkontwana	CDC	Manager: Business Development	Pvt Bag X6009	Port Elizabeth	6000	041 403 0590	041 403 0519	083 397 5258	luvuyo.mkontwana@coega.co.za
Mr	Themba	Koza	CDC	Executive Manager	Pvt Bag X6009	Port Elizabeth	6000	041 403 0400	041 403 0401	082 655 0292	themba.koza@coega.co.za
Ms	Andrea	von Holdt	CDC	Project Manager (EIA)	Pvt Bag X6009	Port Elizabeth	6000	041-4030400	041-4030401	082 657 4648	andrea.vonHoldt@coega.co.za
Ms	Renee	de Klerk	HMG JV	Ngqura Env Manager	PO Box 612054	Bluewater Bay	6212	041 507 8215	041 507 8230	082 073 7934	renee.deklerk@hmgjv.co.za
Ms	Primrose	Madikizela	TNPA	SHEQ Manager	PO Box 162	Port Elizabeth	6000	041-507 1951/1847	041 507 1963	083 409 7106	Primrose.Madikizela@transnet.net
Mr	Joram	Mkosana	NMBM	Environmental Manager	PO Box 11	Port Elizabeth	6000	041 506 5464	041 505 4491		jmkosana@mandelametro.gov.za
Ms	Kithi	Ngesi	NMBM	Environmental Manager	PO Box 11	Port Elizabeth	6000	041-506 1398	041 585 7261	082 782 0408	kngesi@mandelametro.gov.za
Mr	Vien	Kooverji	DWAF	Manager	PO Box 7019	East London	5205	043 722 3805	043 743 3910	083 627 5928	kooverv@dwaf.gov.za
Mr	Pieter	Retief	DWAF		Pvt Bag X6041	Port Elizabeth	6001	041 586 4884	041 586 4210	082 887 6293	retiefp@dwaf.gov.za
Mr	Mike	Spearpoint	Zwartkops Trust	Chairperson	PO Box 94	Redhouse	6215		083 452 7090	041 463 1617	sharpie@global.co.za
Mr	Morgan	Griffiths	EIA Manager	WESSA	Centrahill	Port Elizabeth	6001		041 586 3228	082 957 1618	morgan@wessaep.co.za
Mr	Kous	Slabbert	NMBM	Air Quality	PO Box 11	Port Elizabeth	6000	041 506 5210	041 585 7261	079 490 0358	kslabbert@mandelametro.gov.za

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DRAFT BASIC ASSESSMENT REPORT FOR ELECTRAWINDS PROJECT AT COEGA

Title	First Name	Last Name	Organisation	Capacity	Address	Town	Code	Telephone	Fax	Cellphone	email
Mr	Jerome	Kritzinger	NMBM	Waste Water	PO Box 11	Port Elizabeth	6000	041 506 5335			
Dr	Ane	Oosthuizen	SANParks	National Marine Coordinator	PO Box 20419	Humewood	6013	041 508 5411		083 540 8200	Ane.Oosthuizen@nmmu.ac.za
Ms	Thanduxolo	Lungile	SAHRA		P.O. Box 759	East London	5200	043 722 1740	043 722 1749		tlungile@ec.sahra.org.za
Dr	Paul	Martin	CDC	ECO	PO Box 61029	Bluewater Bay	6212	041 4665698		073 252 4111	apmartin@global.co.za
Mr	Eric	Offerman	Algoa Brick	Managing Director	PO Box 2308	North End	6070	041 408 5600	041 408 5606	083 627 4300	ejo@algoabrick.co.za
Mr	Paul	Lochner	EAP Leader	CSIR	PO Box 320	Stellenbosch	7599	021 888 2486	021 888 2693		plochner@csir.co.za
Ms	Christabel	Geland	EAP Manager	CSIR	PO Box 320	Stellenbosch	7599	021 888 2486	021 888 2693		CGeland@csir.co.za
Ms	Jill	Manuel	NMBM	Environmental Sub Directorate/ CETT Committee	P.O. Box 11	Port Elizabeth	6000	041 506 5630			jmanuel@mandelametro.gov.za
Mr	Donald	Mc Gillivray	Africoast	Project Engineers	PO Box 5104	Walmer	6065	041 505 8000	041 585 3437	082 777 0084	donald@afriacoast.com
Mr	Bruce	Munnings	Africoast	Electrical Engineer	PO Box 5104	Walmer	6065	041 505 8000	041 585 3437	082 823 0647	brucem@afriacoast.com
Mr	Hermann	Oelsner	President	African Wind Energy Association	PO Box 313	Darling	7345	022 492 3095	022 492 3096		office@AfriWEA.org;oelsnergrp@waccess.co.za
Cllr	Linda	Mlomo	NMBM	Ward 53 Councillor	Kamvelihle	Port Elizabeth	6211			082 303 7321	
Mr	JA	van Eeden	Palmtree Power	CEO	PO Box 583	Harrismith	9880			082 773 8496	waterenergy5037@gmail.com
Ms	Lizell	Stroh	SA Civil Aviation Authority	Obstacle Specialist	Private Bag X 73	Halfway House	1685	083 540 8200	011 545 1282		strohl@caa.co.za
Mr	Marius	Keyser	EC Dept. of Roads and Transport	District Roads Engineer	P O Box 11100	Algoa Park	6005	041 452 2073	041 456 1666		wilma.snyman@dot.ecprov.gov.za
Mr	Vuyo	Tele	ATNS		PO Box 5360	Walmer	6065		041 501 5906		VuyoT@ATNS.co.za
Mr	Emil	Unger	Electrawinds	Project Development Africa						082 465 9825	emil@megatrade.co.za
Mr	Tijmen	Keesmaat	Electrawinds								tijmen.keesmaat@electrawinds.be

SECTION F: APPENDICES
DRAFT BASIC ASSESSMENT REPORT FOR ELECTRAWINDS PROJECT AT COEGA

Title	First Name	Last Name	Organisation	Capacity	Address	Town	Code	Telephone	Fax	Cellphone	email
Mr	Ernest	Grunewald	Dedisa Substation	Senior Consultant	PO Box 1091	Johannesburg	2000	011 800 5732	0866557036	083 632 7668	Ernest.Grunewald@eskom.co.za
Mr	Vukile	Menze	Dept of Labour							083 675 0063	
Mr	Alan	Southwood	DEDEA	Environmental Scientist	Private Bag X5001	Greenacres	6057	041 508 5813	086 519 7698		Alan.Southwood@deaet.escape.gov.za
Mr	Brendon	Watkiss	Setplan	Town Planner	PO Box 12703	Centrahil	6006	041 585 1788	041 585 1763		brendon@setplanpe.co.za
Mr	Doug	Jenman			Mill Street	Cape Town	8010			082 415 2515	doug.jenman@gmail.com
Mr	Johan	Minnaar	ATNS Company	Manager ATS	PO Box 5360	Walmer	6065	041 501 5900	041 501 5957		johanm@atns.co.za
Ms	Kirsten	Jeske	The Matrix	Town Planner	PO Box 1737	Port Elizabeth	6000	041 582 1073	041 582 1083		kirsten@thematrixcc.co.za
Ms	Brigitte	Melly	Rhodes University	Student	Summerstrand	Port Elizabeth	6001			083 796 3717	brigittemelly@gmail.com
Mr	Lungile	Motsisi	Eskom Transmission	Investigations and Audit Manager	PO Box 1091	Johannesburg	2000	011 800 5734		083 589 9165	Lungile.Motsisi@eskom.co.za
Dr	Mike	Cohen	CEN IEM Unit	Environmental Consultant	Walmer	Port Elizabeth	6070	041 581 2983	086 504 2549		steenbok@aerosat.co.za
Mr	Mike	Keizer	SANRAL							083 283 6136	-
Mr	Patrick	Cull	The Herald	Assistant Editor	PO Box 5607	Walmer	6065			082 893 2870	pdhcull@iafrica.com
Mr	Robbie	Louw	Promethium Carbon		PO Box 131 253	Bryanston	2021			082 557 8646	Robbie@promethium.co.za

E.3 LETTER 1 TO I&APS

PO Box 27688 Greenacres 6057
120 Diaz Road Adcockvale, PE 6001
Phone 041 374 8426 Fax 041 373 2002
Email sandy@publicprocess.co.za
Ck 97/32984/23 VAT 44601 68273



27 August 2009

«Title» «First_Name» «Last_Name»
«Organisation»
«Address_1»
«Address2»
«Town»
«Code»

Dear «Title» «Last_Name»

RE: NOTIFICATION OF BASIC ASSESSMENT PROCESS: PROPOSED INSTALLATION OF A WIND MONITORING MAST AND TEST WIND TURBINE, COEGA IDZ, ZONE 9, NELSON MANDELA BAY MUNICIPALITY

In terms of Government Regulations 385 and 386 promulgated under Chapter 5 of the National Environmental Management Act, you have been identified as an interested and or affected party (I&AP) for the above project.

This serves as notification that a Basic Assessment process is being conducted on behalf of Electrawinds (the project applicant) for the installation and operation of a wind monitoring mast and test wind turbine in the Coega Industrial Development Zone, Zone 9 (Coega IDZ), Nelson Mandela Bay Municipality. The attached Background Information Document (BID) and locality map will provide you with an overview of the motivation for the project, scope of the project and the project location.

The need for a Basic Assessment is triggered by the inclusion of activities listed in GN R 386: Activity 14.

The construction of masts of any material or type and of any height, including those used for telecommunication broadcasting and radio transmission, but excluding -

(a) masts of 15 metres and lower exclusively used

(i) by radio amateurs; or

(ii) for lighting purposes

(b) flag poles; and

(c) lightning conductor poles.

An application for environmental authorisation to undertake the listed activity will be submitted to the National Department of Water Affairs and Environment (DWEA). The CSIR has been appointed by Electrawinds, an international renewable energy company with its headquarters situated in Belgium, as the independent Environmental Assessment Practitioners to manage the Basic Assessment application and Public Process Consultants will undertake the Public Participation component of the Assessment.

In terms of regulation 56 (1) (b) of Government Notice R 385 interested and affected parties are to request, in writing, that their names be placed on the register. Kindly notify us of your request to register, and state your area of interest/concern in this matter, within 30 days of receipt of this notification (**by 28 September 2009**).

To assist you in the submission of issues and concerns we have included with this correspondence a Background Information Document, Locality Map as well as a Comment Form. Additional issues and concerns may be raised once the Draft Basic Assessment Report (BAR) is released for public review, anticipated to be in late September 2009.

Should you have any queries or require additional information please contact Sandy Wren or Paul-Pierre Steyn using the contact details provided above.

Yours sincerely


SANDY WREN

E.4 ADVERTISEMENT IN THE HERALD NEWSPAPER

Herald, 28 August 2009

**NOTICE OF
BASIC
ASSESSMENT
PROCESS**

Notice is given of a Basic Assessment process being undertaken on behalf of Electrawinds (the Project Applicant) for the installation and operation of a wind monitoring mast and test wind turbine in the Coega Industrial Development Zone 9 (Coega IDZ), Nelson Mandela Bay Municipality.

In terms of GN R 385 and 386 promulgated under Chapter 5 of the National Environmental Management Act (Act 107 of 1998) published in Government Gazette 28753 on 21 April 2006, the need for a Basic Assessment is triggered by the inclusion of activities listed in GN R 386; Activity 14. An application for environmental authorisation to undertake the listed activity will be submitted to the National Department of Water Affairs and Environment (DWEA).

14. The construction of masts of any material or type and of any height, including those used for telecommunication broadcasting and radio transmission, but excluding -

- (a) masts of 15 metres and lower exclusively used
- (i) by radio amateurs; or
- (ii) for lighting purposes
- (b) flag poles; and
- (c) lightning conductor poles.

Electrawinds has appointed the CSIR as the independent Environmental Assessment Practitioners to manage the Basic Assessment application and Public Process Consultants will undertake the Public Participation component of the Assessment. A Background Information Document and locality map for the project can be downloaded from www.publicprocess.co.za

To obtain further information on the project you are required to register your interest on the project database with the consultant indicated below within 30 days of this notification. Please provide your full name, full postal address, phone numbers, email and state your area of interest and/ or concern. Sandy Wren, Public Process Consultants, PO Box 27688, Greenacres, 6057 phone (041) 374-8426 fax (041) 373-2002 email sandy@publicprocess.co.za

E.5 ISSUES RAISED BY I&APS PRIOR TO THE RELEASE OF THE DRAFT BASIC ASSESSMENT REPORT

1. Civil Aviation Impacts

	Issue	Commentator	Date	Response from the EIA team (CSIR and Public Process Consultants)
1.1	Please find our registration to EIA. Find our application for wind Monitoring and Application for Windfarm forms. We currently are dealing with the Belgium Company directly.	<i>Lizelle Stroh, SA Civil Aviation Authority</i>	21Sep09, email	The forms from the SA Civil Aviation Authority have been forwarded to Electrawinds to complete. This is being done in parallel with the Basic Assessment process.
1.2	Prior approval to be obtained from the commissioner for civil aviation to erect wind turbines within 35km of airports.	<i>Johan Minnaar, ATNS Company</i>	11Sep09, fax	Comment noted. The site for the Electrawinds project is outside of the aviation exclusion zone for PE airport (refer to Figure A.6 in Appendix A, Section F). Electrawinds will be working with the SA Civil Aviation Authority to obtain the necessary aviation approvals.
1.3	Impact study to be conducted to determine the effect of a wind farm (in the Coega area) on PE Air Traffic Control Radar System. This study to be done by an independent specialist organization. (Note the NMBM is also busy with a similar study for wind farms in areas south and west of the PE Airport.)	<i>Johan Minnaar, ATNS Company</i>	11Sep09, fax	It is understood that this comment applies to the larger wind farm proposed by Electrawinds consisting of approximately 25 turbines and totaling approximately 57.5 MW. This large-scale wind farm would require a full EIA and issues regarding radar impacts will need to be investigated. For a single turbine (included in this Basic Assessment), Electrawinds are following up potential impacts on airports via the SA Civil Aviation Authority.
1.4	Planning must be done to ascertain whether a wind farm in the Coega area will interfere with a long term plan for an AD (airport) at Coega.	<i>Johan Minnaar, ATNS Company</i>	11Sep09, fax	This issue was discussed between Electrawinds and the Coega Development Corporation (CDC) in a meeting at CDC offices on 4 August 2009. CDC assured Electrawinds that the conceptual plans for an airport at Coega would not stand in the way of the proposed wind project.

2. Noise related Impacts

	Issue	Commentator	Date	Response from the EIA team (CSIR and Public Process Consultants)
2.1	Noise impact of the proposed wind turbine and the collective impact with the 25 turbines during phase 2.	<i>Kobus Slabbert, NMBM Senior EHP</i>	3Sep09, Fax	<p>A single turbine of the type proposed generates approximately 106 dBA at the hub height (100 m above ground). Based on noise measurements conducted for analogous wind turbines in the Western Cape, it is predicated that the noise levels at the base of the turbine will be approximately 60 dBA, which is within the SANS limits proposed for industrial districts of 70 dBA during the day and 60 dBA at night (refer to Section B, sub-section 7(d) of the BA Report for more information). While noise emissions from turbines increase as wind speed increase, it should be noted that the turbine noise is then masked by the wind noise.</p> <p>This Basic Assessment is for the single turbine and the noise impact of 25 turbines would have to be studied as part of the full EIA for the 57.5 MW project.</p>

3. Project Detail Requested

	Issue	Commentator	Date	Response from the EIA team (CSIR and Public Process Consultants)
3.1	We're trying to get an understanding of how much land these turbines will take up, how the rows are arranged. Typically, what they would look like from the air.	<i>Brendon Watkiss, Setplan</i>	16Sep09, email	For the single turbine proposed in the BA process, the foundation base will be 15 m x 15 m. The turbine blades are approximately 100 m in diameter. An image of the single turbine is provided in Section F, Appendix C (facility illustrations).
3.2	Will new roads be built to the site?	<i>Eric Offerman, Algoa Brick</i>	4Sep09, fax	A new gravel access road approximately 100 m long and 5 m wide will need to be built from an existing road to the site of the wind turbine (refer to layout plans in Section F, Appendix A). The wind monitoring mast does not require an access road,

SECTION F: APPENDICES
DRAFT BASIC ASSESSMENT REPORT FOR ELECTRAWINDS PROJECT AT COEGA

4. Environmental Assessment Process and Public Participation

	Issue	Commentator	Date	Response from the EIA team (CSIR and Public Process Consultants)
4.1	I refer to your letter dated 27 August 2009 and wish to inform you that Eskom Transmission is not affected by the application. Our infrastructure are in the vicinity of your project, so please register Eskom Tx as an interested party.	<i>Lungile Motsisi, Eskom Transmission</i>	7Sep09, email	Eskom Transmission has been included on the project database.
4.2	Our company, Promethium Carbon (www.promethium.co.za) is the leading carbon credit consultant in South Africa. Could you please tell us if Electrawinds has already appointed a CDM specialist? If not, I will appreciate it if you can give me the contact details of the person we can speak to.	<i>Robbie Louw, Promethium Carbon</i>	12Sep09, email	The contact details for this I&AP were forwarded to the applicant in order for them to respond.
4.3	Recommend print BID and other subsequent reports double sided to save paper. Google image (fig 3) a bit unclear, especially in black and white. Recommend maps/ images in subsequent reports larger and clearer. Typo on last page of notice of intent.	<i>Andrea Von Holdt, Coega Development Corporation</i>	11Sep09, email	These comments are noted. Maps and images for the Draft Basic Assessment have been made clearer and I&APs will be able to download documentation from the project website.
4.4	Comment period for the Draft BAR to be 40 days as per DEA request at the ELC meeting.	<i>Andrea Von Holdt, Coega Development Corporation</i>	11Sep09, email	In line with this request, a 40 day comment period is being provided on the Draft Basic Assessment report.
4.5	If the mast is situated within 100 meters of a quarry DME must be involved. I hope note.	<i>Eric Offerman, Algoa Brick</i>	4Sep09, fax	The wind turbine is more than 100 m from the Algoa Brick quarry.
4.6	Map showing the site is not clear enough for my comments. Would like more detail.	<i>Eric Offerman, Algoa Brick</i>	4Sep09, fax	Maps and images for the Draft Basic Assessment will be made clearer and I&APs will be able to download documentation from the project website.

E.6 COMMENTS RECEIVED FROM I&APS PRIOR TO RELEASE OF THE DRAFT BASIC ASSESSMENT REPORT

From: Sandy Wren [sandy@publicprocess.co.za]
Sent: 04 September 2009 11:21 AM
To: 'Alan Southwood'
Subject: RE: Test Wind Turbine: Coega IDZ
Attachments: Electrawinds -BID - final - 27Aug09.pdf; Electrawinds - Comment Form - Final - 27Aug09.pdf; Electrawinds - Let 1 - notice of BAR - final for merging - 27Aug09.pdf

Alan

We will place you on the database, I have attached the following public participation documents that are available for the project at the moment.

Background Information Document
Comment Form
Letter to I&APs

Regards

Sandy Wren
Public Process Consultants
PO Box 27688, Greenacres, 6057
120 Diaz Road, Adcockvale, PE, 6001
Phone: 041 374 8426
Fax: 041 373 2002
Cell: 082 4909 828
www.publicprocess.co.za

From: Alan Southwood [mailto:Alan.Southwood@deaet.ecape.gov.za]
Sent: 04 September 2009 10:51 AM
To: sandy@publicprocess.co.za
Subject: Test Wind Turbine: Coega IDZ

Good morning Sandy,

Please register me as an Interested Party.

Regards,

Alan Southwood
Environmental Scientist
Department of Economic Development and Environmental Affairs
Private Bag X5001
6057 Greenacres
Tel.: 041 508 5813
Fax.: 041 508 5865
Fax to E-mail: 086 519 7698
E - mail: Alan.Southwood@deaet.ecape.gov.za

From: Brendon Watkiss [brendon@setplanpe.co.za]
Sent: 16 September 2009 09:13 AM
To: sandy@publicprocess.co.za
Subject: Wind turbines

Hi Sandy.

Thanks for your help this morning.
Herewith please find our company details (following my sig.)

We're trying to get an understanding of how much land these turbines will take up, how the rows are arranged. Typically, what they would look like from the air.

Regards
Brendon Watkiss
BSocSci (UPE) BScHon GIS (NMMU)
MSc GIS:Environmental Geography (Stell.)



SETTLEMENT PLANNING SERVICES
& Geo-Spatial Solutions

40 Bird Street Central PE • PO Box 12703 Centrahil 6006
tel: (041) 585 1788 • fax: (041) 585 1763

From: DougJenman [doug.jenman@gmail.com]
Sent: 14 September 2009 10:06 AM
To: Sandy Wren
Subject: Re: Electrawinds Coega Industrial Wind Project

Thanks Sandy
Details are:
PO Box 12546
Mill st
8010
Phone: 0824152515
Doug Jenman
+27 82 41 52515
Sent via BlackBerry

From: "Sandy Wren" <sandy@publicprocess.co.za>
Date: Mon, 14 Sep 2009 08:52:24 +0200
To: 'Doug Jenman' <doug.jenman@gmail.com>
Subject: RE: Electrawinds Coega Industrial Wind Project

Doug,

Would you please send me your postal address and contact phone numbers so that I can register you on the database. Please find attached the following documents that are available for the project at this stage.

Letter to I&APs
Background Information Document
Comment Form

Regards

Sandy Wren
Public Process Consultants
PO Box 27688, Greenacres, 6057
120 Diaz Road, Adcockvale, PE, 6001
Phone: 041 374 8426
Fax: 041 373 2002
Cell: 082 4909 828
www.publicprocess.co.za

From: Doug Jenman [mailto:doug.jenman@gmail.com]
Sent: 12 September 2009 09:16 PM
To: sandy@publicprocess.co.za
Subject: Electrawinds Coega Industrial Wind Project

Dear Sandy,
Please can I register as an I&AP for the Coega Wind project.
Best regards
Doug

From: Johan Minnaar [johanm@atns.co.za]
Sent: 11 September 2009 11:26 AM
To: Sandy Wren
Subject: RE: Electrawinds

Sandy,

The third issue is that planning must be done to ascertain whether a wind farm in the Coega area will interfere with a long term plan for an AD at Coega.

Regards

Johan Minnaar
Manager Air Traffic Services
ATNS Company

From: Sandy Wren [mailto:sandy@publicprocess.co.za]
Sent: 11 September 2009 11:14
To: Johan Minnaar
Subject: Electrawinds

Johan

We received your comment on the Electrawinds project, your 3rd point is cut off on the fax (last line), could you please elaborate for me what the point is?

Many thanks

Sandy Wren
Public Process Consultants
PO Box 27688, Greenacres, 6057
120 Diaz Road, Adcockvale, PE, 6001
Phone: 041 374 8426
Fax: 041 373 2002
Cell: 082 4909 828
www.publicprocess.co.za

From: Kirsten Jeske [kirsten@thematrixcc.co.za]
Sent: 15 September 2009 04:13 PM
To: sandy@publicprocess.co.za
Cc: Hedwig Crooijmans
Subject: database

Hi Sandy,

Thank you for your help to date and in advance for future updates. As advised, please include us in the 'Electrawinds' database for future updates.

Kind Regards,
Kirsten Jeske B.Bdg.A B.Arch M.St (Cambridge) RIBA
Senior Architect
Green Star SA Accredited Professional

Please consider the environment before printing this email



The Matrix...cc
Urban Designers and Architects

Tel 041 582 1073
Fax 041 582 1083

22 Lansdowne Place
Richmond Hill
Port Elizabeth 6001

P O Box 1737
Port Elizabeth 6000

From: Lizelle Stroh [StrohL@caa.co.za]
Sent: 21 September 2009 12:01 PM
To: andy@publicprocess.co.za
Subject: Wind monitoring/wind turbine, Coega idz, Nelson Mandela Bay Municipality
Attachments: Di5520407210525.pdf; Application for windfarms.doc; obstacle application07082009.pdf; obstacle details.pdf

Please find our registration to EIA

Find our application for wind Monitoring and Application for Windfarm forms. We currently are dealing with the Belgium Company directly.

Thanks

Kind regards

*Lizell Stroh
Obstacle Specialist
Procedure design and Cartography
For SA Civil Aviation Authority
Tel: 011 545 1232
Fax: 011 545 1282
email: strohl@caa.co.za
website: www.caa.co.za*

From: Brigitte Melly [brigittemelly@gmail.com]
Sent: 22 September 2009 12:07 PM
To: Sandy Wren
Subject: Re: I&AP

Hi

My address is:

6 Brewer road
Summerstrand
Port Elizabeth
6001

thanks for the documents

Brigitte

On Tue, Sep 22, 2009 at 12:03 PM, Sandy Wren <sandy@publicprocess.co.za> wrote:

Brigitte

Would you kindly forward me your postal address so that I may place you on the database for the wind farm project at Coega. I have also attached the public participation documents that are available at this stage for the project.

Please note we have not yet initiated the EIA or Public Participation Process for the oil refinery at Coega. I will however save your contact details for when the EIA for this project is initiated in the public domain.

Sandy Wren
Public Process Consultants
PO Box 27688, Greenacres, 6057
120 Diaz Road, Adcockvale, PE, 6001
Phone: 041 374 8426
Fax: 041 373 2002
Cell: 082 4909 828
www.publicprocess.co.za

From: Brigitte Melly [mailto:brigittemelly@gmail.com]
Sent: 22 September 2009 11:51 AM
To: sandy@publicprocess.co.za
Subject: I&AP

Hi there

i would like to register as a I&AP for the Oil refinery and wind farm in the Coega IDZ

thanks very much

Brigitte Melly

--

Brigitte Melly
MSc in Geography
Geography Department
Rhodes University
(c) 083 796 3717

From: Lungile Motsisi [Lungile.Motsisi@eskom.co.za]
Sent: 07 September 2009 01:36 PM
To: sandy@publicprocess.co.za
Subject: Basic assessment for a proposed wind measuring mast and wind turbine in Coega

Sandy,

I refer to your letter dated 27 August 2009 and wish to inform you that Eskom Transmission is not affected by the this application. Our infrastructure are in the vicinity of your project, so please register Eskom Tx as an interested party.

For any further information please contact the writer at the above mentioned telephone number.

Regards,

Lungile Motsisi
Investigations and Audit Manager
Eskom Transmission
Land and Rights

Tel: 011 800 5734
Cell: 083 589 9165

From: Mike Cohen [steenbok@aerosat.co.za]
Sent: 07 September 2009 07:09 AM
To: sandy@publicprocess.co.za

Hi Sandy
Hope that you are well.

Please register me as an Interested party for the Electrawinds project

Many thanks and regards

Mike

Dr Mike Cohen
CEN Integrated Environmental Management Unit
(CEN IEM Unit)
36 River Road
Walmer
Port Elizabeth
6070
South Africa
Telephone: (27) 041 5812983
Fax: (27) 0865042549
E-mail: steenbok@aerosat.co.za
Web: www.environmentcen.co.za

From: Viwe Biyana [Viwe.Biyana@coega.co.za]
Sent: 23 September 2009 01:06 PM
To: Sandy Wren
Cc: Firhana Sam; Gerald Ehlers
Subject: RE: BID comments for Electrawinds

Dear Sandy

I have received drawing (P9049-200-001) for the Wind turbine and the mast and the proposed site for the mast is still in zone 9 but closer to the N2 road. It is then important to include SANRAL in the register for interested and affected parties. The contact person is Mike Keizer (SANRAL) and his contact details are 083 283 6136.

Mike has briefly spoken to one of my colleagues Johann Brink about the matter.

Regards

Viwe Biyana
SHEQ Project Manager :Operations BU
Coega Development Corporation
Tel : +27 (0) 41 403 0501
Fax : +27 (0) 41 403 0401
Cell : +27 (0) 83 2286872

From: Tanya Cull [wpook@iafrica.com]
Sent: 16 September 2009 08:51 AM
To: sandy@publicprocess.co.za
Subject: Coega windfarm

Hullo Sandy

I trust you are well.
Would you be so kind as to add me as an interest party for the Coega windfarm

Many thanks

Patrick Cull
Assistant Editor
The Herald
PO Box 5607
Walmer
6065

082 893 2870
pdhcull@iafrica.com

From: Robbie Louw [Robbie@promethium.co.za]
Sent: 14 September 2009 03:40 PM
To: Sandy Wren
Subject: RE: Carbon credits for Coega wind project

Hi Sandy,

Thanks for the reply. I am looking forward to the contact details of your client.

My postal address is:
PO Box 131 253
Bryanston
2021

Best regards
Robbie

From: Sandy Wren [mailto:sandy@publicprocess.co.za]
Sent: 14 September 2009 08:51 AM
To: Robbie Louw
Subject: RE: Carbon credits for Coega wind project

Robbie, I will forward your contact details to the client for them to follow up with you. Would you like to register on the project database? If yes, could you send me your postal address.

Many Thanks
Sandy Wren
Public Process Consultants
PO Box 27688, Greenacres, 6057
120 Diaz Road, Adcockvale, PE, 6001
Phone: 041 374 8426
Fax: 041 373 2002
Cell: 082 4909 828
www.publicprocess.co.za

From: Robbie Louw [mailto:Robbie@promethium.co.za]
Sent: 12 September 2009 04:39 PM
To: sandy@publicprocess.co.za
Subject: Carbon credits for Coega wind project

Hello Sandy,

Our company, Promethium Carbon (www.promethium.co.za) is the leading carbon credit consultant in South Africa.

Could you please tell us if Electrawinds has already appointed a CDM specialist? If not, I will appreciate it if you can give me the contact details of the person we can speak to.

Best regards
Robbie Louw
082 557 8646

From: Ernest Grunewald [Ernest.Grunewald@eskom.co.za]
Sent: 31 August 2009 06:48 AM
To: Sandy Wren
Subject: Re: contact details

Eskom
Transmission
PO Box 1091
JHB
2000

Regards

>>> "Sandy Wren" <sandy@publicprocess.co.za> 2009/08/26 03:13 PM >>>

Ernest

Together with the CSIR we are undertaking an EIA for a wind turbine in the Coega IDZ and need to place you on the project database for the EIA, would you kindly forward me your postal address.

Thanks

Sandy Wren
Public Process Consultants
PO Box 27688, Greenacres, 6057
120 Diaz Road, Adcockvale, PE, 6001
Phone: 041 374 8426
Fax: 041 373 2002
Cell: 082 4909 828
www.publicprocess.co.za

PUBLIC INVOLVEMENT PROCESS REPLY FORM

BASIC ASSESSMENT REGISTRATION AND COMMENT FORM

Electrawinds, Installation of a Wind Monitoring Mast and Test Wind Turbine,
Coega IDZ, Zone 9, NMBM

Listed Activity: GN R386 Activity 14.

Return Completed Reply Form by 28 September 2009, to:

Public Process Consultants, PO Box 27688, Greenacres 6057
Phone: 041 - 374 8426 or Fax 041-373 2002 or Email sandy@publicprocess.co.za

Please Complete all Relevant Sections Below

Please provide your full contact details:

FIRST NAME: ANDREA SURNAME: VON HOLDT
ORGANISATION: CDC POSITION: ENVIRONMENTAL P.M.
POSTAL ADDRESS: PRIVATE BAG X6009 ; PORT ELIZABETH
CODE: 6000
PHONE: 041-4030400 FAX: 041-4030401
CELL: 082-6574648 EMAIL: andrea.vonholdt@coega.co.za

Would you like to register as an interested and affected party? (please tick the appropriate box)

NOTE: You are required to register as an I&AP in order to receive further
correspondence regarding the Basic Assessment.

<input checked="" type="checkbox"/> YES
<input type="checkbox"/> NO

**Please clearly list your issues, concerns, views and/or questions you may have regarding
the project (use additional pages if required)**

- ① Recommend print BID, ^{& other subsequent reports} double-sided - save paper
- ② Google image (Fig 3) a bit unclear, especially in black & white. Recommend maps / figures in subsequent reports larger & clearer.
- ③ Typo on last pg regarding notice of intent
- ④ Comment period for draft BAR to be 40 days, as per DEA request @ the ELC meeting

PUBLIC INVOLVEMENT PROCESS REPLY FORM

BASIC ASSESSMENT REGISTRATION AND COMMENT FORM

Electrawinds, Installation of a Wind Monitoring Mast and Test Wind Turbine,
Coega IDZ, Zone 9, NMBM

Listed Activity: GN R386 Activity 14.

Return Completed Reply Form by 28 September 2009 to:

Public Process Consultants, PO Box 27688, Greenacres 6057
Phone: 041 - 374 8426 or Fax 041-373 2002 or Email: sandy@publicprocess.co.za

Please Complete all Relevant Sections Below

Please provide your full contact details:

FIRST NAME: ERIC J. SURNAME: OFFERMAN

ORGANISATION: Coega Brick (Pty) Ltd POSITION: M. D.

POSTAL ADDRESS: P.O. Box 2308 North End P. E.

CODE: 6056

PHONE: 041 4085600 FAX: 041 4085606

CELL: 0836274300 EMAIL: ejo@coegabrick.co.za

Would you like to register as an interested and affected party? (please tick the appropriate box)

NOTE: You are required to register as an I&AP in order to receive further
correspondence regarding the Basic Assessment

<input checked="" type="checkbox"/>
<input type="checkbox"/>

Please sign/initial your issues, concerns, views and/or questions you may have regarding
the project. Additional space is provided.

- ① If mast is situated within 100 metres of quarry D.M.E. mast be involved. I hope not!
- ② Will new roads be built to site?
- ③ Map showing site not clear enough for my comments. Would like more detail.

Registration and comments form for Issues & Concerns

11 Sep. 2009-11:05

No. 0107—P. 1

PUBLIC INVOLVEMENT PROCESS REPLY FORM

BASIC ASSESSMENT REGISTRATION AND COMMENT FORM

Electrawinds, Installation of a Wind Monitoring Mast and Test Wind Turbine,
Coega IDZ, Zone 9, NMBM

Listed Activity: GN R386 Activity 14.

Return Completed Reply Form by 28 September 2009, to:

Public Process Consultants, PO Box 27688, Greenacres 6057
Phone: 041 - 374 8426 or Fax 041-373 2002 or Email sandy@publicprocess.co.za

Please Complete all Relevant Sections Below

Please provide your full contact details:

FIRST NAME: JOHAN	SURNAME: MINNAAR
ORGANISATION: ATNS COMPANY	POSITION: MANAGER ATS
POSTAL ADDRESS: P.O. Box 5360, WALMEL	
CODE: 6065	
PHONE: 041 - 5015900	FAX: 041 - 5015957
CELL: —	EMAIL: johanm@atns.co.za

Would you like to register as an interested and affected party? (please tick the appropriate box)

NOTE: You are required to register as an I&AP in order to receive further correspondence regarding the Basic Assessment.

YES <input checked="" type="checkbox"/>
NO <input type="checkbox"/>

Please clearly list your issues, concerns, views and/or questions you may have regarding the project (use additional pages if required).

1. Prior approval to be obtained from the Commissioner for Civil aviation to erect wind turbines within 35 km of airports.
 2. Impact study to be conducted to determine the effect of a wind farm (in the Coega area) on PE Air Traffic Control Radar system.
(This study to be done by independent specialist organisation)
- (Note that the NMMM is also busy with a similar study for wind farms in the areas south & west of the PE Airport.)

Registration and comments form for Issues & Concerns

3. Planning must be done to ascertain whether a wind farm in this area will interfere with ...

SECTION F: APPENDICES
DRAFT BASIC ASSESSMENT REPORT FOR ELECTRAWINDS PROJECT AT COEGA

SEP.03.2009 11:44 0415857261

ENVIRO SERVICES

#2854 P.001 /001

PUBLIC INVOLVEMENT PROCESS REPLY FORM

BASIC ASSESSMENT REGISTRATION AND COMMENT FORM

Electrawinds, Installation of a Wind Monitoring Mast and Test Wind Turbine,
Coega IDZ, Zone 9, NMBM

Listed Activity: GN R386 Activity 14.

Return Completed Reply Form by 28 September 2009, to:

Public Process Consultants, PO Box 27688, Greenacres 6057
Phone: 041 - 374 8426 or Fax 041-373 2002 or Email: sandy@publicprocess.co.za

Please Complete all Relevant Sections Below

Please provide your full contact details:

FIRST NAME: KOBUS SURNAME: SLABBERT
ORGANISATION: NMBM POSITION: SENIOR EHP
POSTAL ADDRESS: P.O. Box 11, PORT ELIZABETH
CODE: 6000
PHONE: 041 506 5210 FAX: 041 585 7261
CELL: 079 490 358 EMAIL: kslabbert@mandelametro.gov.za

Would you like to register as an interested and affected party? (please tick the appropriate box)

NOTE: You are required to register as an I&AP in order to receive further
correspondence regarding the Basic Assessment.

YES
 NO

Please clearly list your issues, concerns, views and/or questions you may have regarding
the project (use additional pages if required)

NOISE IMPACT OF THE PROPOSED WIND TURBINE AND THE
COLLECTIVE IMPACT WITH 25 TURBINES DURING PHASE 2.

Registration and comments form for Issues & Concerns

PUBLIC INVOLVEMENT PROCESS REPLY FORM

BASIC ASSESSMENT REGISTRATION AND COMMENT FORM

**Electrawinds, Installation of a Wind Monitoring Mast and Test Wind Turbine,
Coega IDZ, Zone 9, NMBM**

Listed Activity: GN R386 Activity 14.

Return Completed Reply Form by 28 September 2009, to:

Public Process Consultants, PO Box 27688, Greenacres 6057
Phone: 041 - 374 8426 or Fax 041-373 2002 or Email sandv@publicprocess.co.za

Please Complete all Relevant Sections Below

Please provide your full contact details:

FIRST NAME: Lizell SURNAME: Ströh
ORGANISATION: SACAA POSITION: Obstacle specialist
POSTAL ADDRESS: Private Bag X 73 Halfway House
CODE: 1685
PHONE: 011 545 1232 FAX: 011 545 1282
CELL: 083 461 6660 EMAIL: strohl@cca9.co.za

Would you like to register as an interested and affected party? (please tick the appropriate box)

NOTE: You are required to register as an I&AP in order to receive further
correspondence regarding the Basic Assessment.

YES <input checked="" type="checkbox"/>
NO <input type="checkbox"/>

**Please clearly list your issues, concerns, views and/or questions you may have regarding
the project (use additional pages if required)**

APPENDIX F
**Information in Support of
Applications for Exemption**

Not applicable.

APPENDIX G **Other information**

- G.1 "Letter of consent" from CDC for use of the proposed site
- G.2 Notice of Intent submitted by CSIR (17/09/2009) to DEAT
- G.3 Letter from DEAT (25/09/2009) acknowledging the Notice of Intent

G.1 "LETTER OF CONSENT" FROM CDC FOR USE OF THE PROPOSED SITE



Corner Aleyan Road & Zibuko Street, Zone 1, Coega IDZ, Port Elizabeth, 6100
Coega Development Corporation, P/B X6009, Port Elizabeth, 6000, South Africa
Tel: +27 (0) 41 403 9100 • Fax: +27 (0) 41 403 0401
Contact Centre National - Tel: 08610 COEGA / 08610 76347
Contact Centre International - Tel: +27 (0) 41 406 4800 • Fax: +27 (0) 41 406 4996 • E-mail: contactcentre@coega.co.za
Website: www.coega.com

Mr Emil Unger
P O Box 1171
Umhlanga Rocks
4320
Per e-mail: emil@megatrade.co.za

30 June 2009

Dear Sir

APPLICATION TO OCCUPY LAND WITHIN THE COEGA INDUSTRIAL DEVELOPMENT ZONE

I refer to your request to erect a mast on land within the Coega IDZ solely to gather data with a view to informing a decision as to whether the area is suitable for the erection of wind turbines.

Permission is hereby granted to you to occupy the land depicted on the attached aerial photo for this purpose subject to the following conditions:

1. No construction or bush clearing being commenced before a Record of Decision is issued by the responsible environmental authorities authorizing the erection of the mast;
2. During construction you will be required to comply with the CDC's Zone Labour Agreement, Environmental Specifications, and Architectural and Landscaping Guidelines;
3. At all times you will be required to adhere to the Zone Rules applicable to all tenants in the IDZ;
4. CDC not being required to provide you with any infrastructure or utility services to the site;
5. CDC not being liable for any loss or damage to the structure howsoever caused, and you indemnify the CDC against any such claims. In this regard, you be required to take out adequate public liability insurance to cover any claims that may arise for damage of any nature caused by the structure.

Permission to occupy the site will lapse 18 months from the date on which the Record of Decision is granted by which time you will have dismantled the mast and rehabilitated the site in accordance with the CDC's Environmental Specifications.

Directors: M M Ngqasheng (Chair); M Sibinga (CEO); Dr P Jourdan; J de Bruyn; S Nondwangu; M D Matchamba; S Zikode; P S Ndlovu
Company Secretary: M N Pango
Registration number: 82603891/07

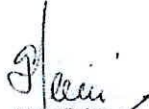
SECTION F: APPENDICES
DRAFT BASIC ASSESSMENT REPORT FOR ELECTRAWINDS PROJECT AT COEGA

There will be no extension given of the permission to occupy the site beyond what is contained herein, and this permission does not constitute any tacit or express acceptance that your project will be accepted within the IDZ.

Please liaise with Mr Fezile Ndema on 0836040441 regarding access arrangements.

Please also confirm acceptance of the terms stated in this letter. On receipt thereof, the CDC will provide you with formal permission to undertake an environmental assessment on the site.

Yours faithfully



Allan Zeiss

Unit Head: Commercialisation

Encl. • Site location

cc. **Fezile Ndema** Investor Services Manager
Luvuyo Mkontwana Manager: Business Development
Andrea von Holdt Project Manager: Operations Business Unit

G.2 NOTICE OF INTENT SUBMITTED BY CSIR (17/09/2009) TO DEAT



environment & tourism

Department:
Environmental Affairs and Tourism
REPUBLIC OF SOUTH AFRICA

**Notice of intent to submit an application in terms of regulation 22 (b) of
Government Notice No. R 385 in terms of Chapter 5 of the National
Environmental Management Act, 1998 (Act 107 of 1998).**

July 2006

Kindly note that:

1. The purpose of this form is to **notify** the Department of the intent to submit an application for basic assessment and to provide information to the competent authority of the proposed development.
2. This notification should be submitted not less than 14 days prior to **initiating** the basic assessment process.
3. Based on the information contained in this notice the competent authority may in terms of regulation 5(b) **advise** on the nature and extent of any processes to be followed.
4. The required information must be typed within the spaces provided in the form. The sizes of the spaces provided are not necessarily indicative of the amount of information to be provided. It is in the form of a table that can extend itself as each space is filled with typing.
5. This notice must be submitted to the Department at the postal address given below or by delivery thereof to the Registry Office of the Department. Should the notice not be submitted to the correct addresses given below this may result in unnecessary delays.
6. Should an applicant and not the Environmental Assessment Practitioner complete this notice then an application for exemption from the requirement that the notice of intent be prepared and submitted by an Environmental Assessment Practitioner must be made by completing the relevant section below.

**APPLICATION FOR EXEMPTION FROM AN ENVIRONMENTAL ASSESSMENT
PRACTITIONER FROM HAVING TO SUBMIT THE NOTICE OF INTENT TO APPLY:**

Provide a detailed motivation for not appointing an Environmental Assessment Practitioner (supporting documents, if any, should be attached to this report):	
I declare that the above motivation is accurate and, hereby apply for exemption in terms of regulation 51 of the EIA Regulations, 2006, from having to appoint an Environmental Assessment Practitioner as required by regulation 22 (b) of the Environmental Impact Assessment Regulations, 2006.	
Signature of the Applicant:	Date:

Please note:

- The exemption applied for above only relates to regulation 22 (b) that requires that the notice of intent be prepared and submitted by an Environmental Assessment Practitioner.
- That any exemption decisions by the Department may be appealed which may result in the application process being suspended pending the outcome of the appeal process.

SECTION F: APPENDICES
DRAFT BASIC ASSESSMENT REPORT FOR ELECTRAWINDS PROJECT AT COEGA

1. BACKGROUND INFORMATION

Project applicant:	Electrawinds N.V.		
Trading name (if any):	Electrawinds Project Development – Africa		
Contact person:	Emil Unger		
Postal address:	P.O. Box 1171, Umhlanga Rocks		
		Postal code:	4320
Telephone:	()	Cell:	082 465 9825
E-mail:	emil@megatrade.co.za	Fax:	(086) 600 8622

Project Consultant	Council for Scientific and Industrial Research (CSIR)		
Contact person:	Paul Lochner		
Postal address:	P.O. Box 320, Stellenbosch		
		Postal code:	7599
Telephone:	(021) 888 2486	Cell:	084 442 3646
E-mail:	plochner@csir.co.za	Fax:	(021) 888 2693

Environmental Assessment Practitioner (EAP):	Paul Lochner		
Contact person:	Paul Lochner		
Postal address:	P.O. Box 320, Stellenbosch		
		Postal code:	7599
Telephone:	(021) 888 2486	Cell:	084 442 3646
E-mail:	plochner@csir.co.za	Fax:	(021) 888 2693
EAP Qualifications	B.Sc (Civil Engineering), UCT (1990) M.Phil Environmental and Geographical Sciences, UCT (1992)		
EAP Registrations/Associations	Registered as an EAP for South Africa as from 14 July 2003		

Landowner:	Coega Development Corporation (CDC)		
Contact person:	Allan Zeiss		
Postal address:	P.O. Box 6009, Port Elizabeth		
		Postal code:	6000
Telephone:	(041) 403 0400	Cell:	
E-mail:	centre@coega.co.za	Fax:	(041) 403 0401

Please Note: In instances where there is more than one landowner, please attach a list of landowners with their contact details to the back of this page.

Municipality in whose area of jurisdiction the proposed activity will fall:	Nelson Mandela Metropolitan Municipality / Uitenhage District Municipality		
Contact person:	Dawn McCarthy		
Postal address:	P.O. Box 9, Port Elizabeth		
		Postal code:	600
Telephone	(041) 506 3111	Cell:	082 827 7744
E-mail:	dmccarth@mandelametro.gov.za	Fax:	(041) 506 2403

Please Note: In instances where there is more than one Municipality involved, please attach a list of Municipality with their contact details to the back of this page.

Project title:	BA for the erection of a proposed Wind Measuring Mast and Wind Test Turbine		
Property location:	Zone 9, Coega Industrial Development Zone (IDZ)		
Farm/Erf name & number (incl. portion):	Erf 275		
SG21 Digit code:	275 Coega - C07600230000027500000		

Please Note: Where a large number of properties are involved (e.g. linear activities), attach a list of property descriptions to the back of this page.

Street address:			
Magisterial District or Town:	Uitenhage District		

Please Note: In instances where there is more than one town or district involved, please attach a list of towns or districts as well as complete physical address information for the entire area to the back of this page.

Closest City/Town:	Port Elizabeth	Distance	15 km
Zoning of Property:	Special Purposes in terms of LUPO		

SECTION F: APPENDICES
DRAFT BASIC ASSESSMENT REPORT FOR ELECTRAWINDS PROJECT AT COEGA

Please Note: In instances where there is more than one zoning, please attach a list of zonings that also indicate which portions each use pertains to, to this application.		
Is a rezoning application required?	YES	NO
Is a consent use application required?	YES	NO
Owners consent:	The Letter of Consent from Mr Allan Zeiss of the Coega Development Corporation for the proposed activities is attached as Appendix A .	

2. ACTIVITIES INTENDED TO BE APPLIED FOR

All potential listed activities for basic assessment (Government Notice R386 activities) associated with the proposed development must be indicated below.

Government Notice R386 Activity No(s):	Describe the relevant Basic Assessment Activity in writing
14	The construction of masts of any material or type and of any height, including those used for telecommunication broadcasting and radio transmission, but excluding – a) masts of 15 metres and lower exclusively used i. by radio amateurs; or ii. for lighting purposes b) flag poles; and c) lightning conductor poles
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.

Please note: Only those activities for which the applicant applies will be considered for authorization. The onus is on the applicant to ensure that all the applicable listed activities are included in the application. Failure to do so may invalidate the application.

3. ACTIVITY DESCRIPTION

3.1 Is the project a new development or an upgrade of an existing development?	YES	NO
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3.2 Clearly describe the activity and associated infrastructure for which you are applying as indicated in section above.

<p>Electrawinds, a Belgium-based company, has announced their intent to invest in wind energy in the Coega Industrial Development Zone (IDZ), near Port Elizabeth. As the first phase of their investment, and in order to gather baseline data on wind characteristics to guide further investment decisions, they propose to erect a wind monitoring mast of 60 m height and install a single wind turbine of 2.3 MW capacity within the Coega IDZ, at a site in Zone 9 that has been designated by CDC (see letter in Appendix A). The wind measuring mast will be installed for a period of approximately 12 months. The single turbine will feed power into the Metro's electricity supply network and operate for approximately 20 years. Both the mast and turbine are included in this Basic Assessment.</p> <p>The directly associated infrastructure for the project includes:</p> <ol style="list-style-type: none"> i. Construction of a short section of gravel access road (approx 5 m wide and 50 m long) to the mast and turbine. ii. Power line connection to the grid, via the existing Municipal power line which passes within 500m of the site. iii. Cabin of 2.5 m x 5 m x 2.5 m height at the base of the turbine (similar to a container) to accommodate the transformers <i>Note:</i> Electrawinds intend to place all equipment inside the base of the turbine tower (which is 5m diameter). However, the size of the transformers is still being determined and depends on availability of suitable compact models of transformers in South Africa. The transformers may therefore need to be housed in a separate cabin next to the base of the turbine. iv. Hard standing surface (approx 30 m x 40 m), consisting of compacted gravel, to accommodate a 600 tonne crane during construction, and which is retained during operations for possible use of cranes for maintenance.

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DRAFT BASIC ASSESSMENT REPORT FOR ELECTRAWINDS PROJECT AT COEGA

<p>3.3 Indicate the surface area to be taken up by the proposed activity and associated infrastructure (i.e. physical footprint).</p>	<p>i. The concrete foundation for the wind turbine tower is a maximum of 16 m x 16 m. A circle of radius of approx 20 m will be dug to a depth of approx 2.5 m, in which the foundation will be cast. It is the intention of Electrawinds to re-use the excavated material to refill the hole and cover the concrete foundations. Another potential option could be to crush the excavated material and use it for the short access road. This will be investigated.</p> <p>ii. The base of the measuring mast is less than 1m x 1m. The mast is supported by stays that extend 50 m on either side of the mast in four directions.</p> <p>iii. The cabin's is 2.5 m x 5 m x 2.5 m height.</p> <p>iv. The hard standing surface is 30 m x 40 m.</p> <p>Total surface area to be utilised is less than 2000 m²</p>
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4. WASTE, EFFLUENT AND EMISSION MANAGEMENT

(a) Solid waste management

(i) Will the activity produce any solid waste (including rubble) during the construction or operational phases?	YES	NO	UNCERTAIN
(ii) If yes, will it feed into a municipal waste stream?	YES	NO	UNCERTAIN
(iii) If no to (ii) above, describe the types of solid waste and how each will be treated / disposed of.			
It is intended that the materials excavated from the foundation for the turbine will be spread around the base of the turbine (to cover the concrete foundation), used to refill the remainder of the excavations and possibly used for the construction of the access road.			

(b) Effluent

(i) Will the activity produce sewage and or any other effluent?	YES	NO	UNCERTAIN
(ii) If yes, will the sewage / effluent be treated and/or disposed of in a municipal system?	YES	NO	UNCERTAIN
(iii) If no to (ii) above, briefly describe the nature of the sewage / effluent and how it will be treated and/or disposed of:			
During the operational phase, there will be no sewage effluent produced.			
During the construction phase, it is expected that (in accordance with the construction guidelines of the Coega IDZ) portable toilets will be supplied. These facilities will not generate effluent as they are self sufficient and all waste is transferred from the site to a disposal area, on a regular basis, i.e. daily / weekly.			

(c) Emissions into the atmosphere

(i) Will the activity produce emissions that will be disposed of into the atmosphere?	YES	NO	UNCERTAIN
(ii) If yes, describe the emissions in terms of type and concentration and how it will be treated/mitigated:			

5. WATER USE

Please indicate the source(s) of water for the activity by ticking the appropriate box(es)

Municipal	Water board	Groundwater	River, Stream, Dam or Lake	Other	Ready mix concrete will be used during construction. Water is therefore not needed for mixing concrete on site. Approx 10 m ³ water will be required during construction to wash the equipment used for working with concrete. The dirty wash water will be stored on site and removed by a suitable waste water operator at the end of construction.
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If water is to be extracted from groundwater, river, stream, dam, lake or any other natural feature, please indicate		
the volume that will be extracted per month:	m ³	
Please provide proof of assurance of water supply e.g. Letter of confirmation from municipality / water board, yield of borehole		
Does the activity require a water use permit / license from DWAF?	YES	NO

6. POWER SUPPLY

6.1 Please indicate the source of power supply e.g. Municipality / Eskom / Renewable energy source

During construction, power will be generated on site using generators. During operations, power from the turbine will be supplied to the Municipality.

6.2 If power supply is not available, where will power be sourced from?

See above response.

7. LAND USE DESCRIPTION

(i) Describe the current land use of the proposed site(s) for the activity

The site demarcated by CDC for the monitoring mast and wind turbine falls within Zone 9 of the Coega Industrial Development Zone and is currently undeveloped.

(ii) Describe the surrounding land uses

There are currently no new industrial activities in the immediate vicinity of the site, besides a clay quarry located approximately 500m to the west and the new Dedisa sub-station located to the north. There is currently a gravel road running alongside the site, leading to the quarry.

8. GROUND COVER

Tick the types of groundcover present on the site.

Indigenous vegetation— good condition	Indigenous vegetation with scattered aliens	Indigenous vegetation with heavy alien infestation	Veld dominated by alien species	Gardens	Other (describe)
Sport field	Cultivated land	Paved surface	Building or other structure	Bare soil	

9. CULTURAL/HISTORICAL FEATURES

Please be advised that if section 38 of the National Heritage Resources Act 25 of 1999 is applicable to your proposed development, then you are requested to furnish this Department with written comment from the relevant Heritage authority as part of your public participation process.

Section 38 of the Act states as follows:

38. (1) Subject to the provisions of subsections (7), (8) and (9), any person who intends to undertake a development categorised as-

- (a) *the construction of a road, wall, powerline, pipeline, canal or other similar form of linear development or barrier exceeding 300m in length;*
 - (b) *the construction of a bridge or similar structure exceeding 50m in length;*
 - (c) *any development or other activity which will change the character of a site-*
 - (i) *exceeding 5 000 m² in extent; or*
 - (ii) *involving three or more existing erven or subdivisions thereof; or*
 - (iii) *involving three or more erven or divisions thereof which have been consolidated within the past five years;*

or

 - (iv) *the costs of which will exceed a sum set in terms of regulations by SAHRA or a provincial heritage resources authority;*
- (d) *the re-zoning of a site exceeding 10 000 m² in extent; or*
- (e) *any other category of development provided for in regulations by SAHRA or a provincial heritage resources authority, must at the very 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.*

Are there any signs of culturally or historically significant elements including archaeological or palaeontological sites, on or in close proximity to the site?	YES	NO
	UNCERTAIN	
If YES, describe:		
Will any building or structure older than 60 years be affected in any way?	YES	NO
If YES, describe:		
Is it necessary to apply for a permit in terms of the National Heritage Resources Act, 1999 (Act 25 of 1999)?	YES	NO
If yes, please submit or, make sure that the applicant or a specialist submit the necessary application to SAHRA or the relevant provincial heritage agency and attach proof thereof to this application.		
Please note: South African Heritage Resource Agency and/or any of their delegated provincial agencies comments needs to be submitted with the Basic Assessment Report.		

10. NOTICE OF EXEMPTION APPLICATIONS

Is it your intention to apply for exemption from any of the following provisions of the regulations?:		
Appointment of an Independent Environmental Assessment Practitioner	YES	NO
Consideration of Alternatives	YES	NO
Provisions requiring or regulating the Public Participation Process	YES	NO
Any other provisions of the regulations	YES	NO
<p>Please Note:</p> <p>Based on the information contained in this application notice the Department may advise whether such an exemption application would be appropriate.</p>		

Applicant (Full names) _____

Date: _____ Place: _____

Signature _____

Environmental Assessment Practitioner (Full names): PAUL ANDREW LOCHNER

Date: 16 SEPTEMBER 2009 Place: STELLENBOSCH

Signature _____

SECTION F: APPENDICES
DRAFT BASIC ASSESSMENT REPORT FOR ELECTRAWINDS PROJECT AT COEGA

DEPARTMENTAL DETAILS

Postal address:

Department of Environmental Affairs and Tourism
Attention: Director: Environmental Impact Evaluation
Private Bag X447
Pretoria
0001

Physical address:

Department of Environmental Affairs and Tourism
Fedsure Forum Building (corner of Pretorius and Van der Walt Streets)
2nd Floor North Tower
315 Pretorius Street
Pretoria
0002

Queries should be directed to the Directorate: Environmental Impact Evaluation at:
Tel: (012) 310 3268 Fax (012) 320 7539

Please note that this form must be copied to the relevant provincial environmental department.

View the Department's website at <http://www.deat.gov.za/> for the latest version of the documents

G.3 LETTER FROM DEAT (25/09/2009) ACKNOWLEDGING THE NOTICE OF INTENT



environmental affairs

Department:
Environmental Affairs
REPUBLIC OF SOUTH AFRICA
Private Bag X 447- PRETORIA - 0001- Fedsure Building - 315 Pretorius Street - PRETORIA
Tel (+ 27 12) 310 3811 - Fax (+ 2712) 322 2682

Ref: 12/12/20/1680
Enquiries: Ms L Grobbelaar
Tel: 012 310-3087 Fax: 012 320-7539 E-mail: LGrobbelaar@deat.gov.za

CSIR
Attention: Paul Lochner
P.O. Box 320
STELLENBOSCH
7599

Fax: (021) 888-2693

Dear Mr Lochner

NOTIFICATION OF INTENT TO APPLY FOR THE PROPOSED ESTABLISHMENT OF A WIND MEASURING MAST AND WIND TEST TURBINE – COEGA IDZ, EASTERN CAPE PROVINCE

Your notice of intent form dated 17 September 2009 and received by this department on 23 September 2009 refers. The application has been assigned with the reference number **12/12/20/1680**. Kindly quote this reference number in any future correspondence in respect of the application.

You may proceed with the Basic Assessment Report process required in terms of the Environmental Impact Assessment Regulations, 2006.

The Applicant must ensure that all requirements of Chapter II, Section 38 of the National Heritage Resources Act, Act 25 of 1999, are complied with in this EIA process, and that the comments and / or recommendations of the relevant heritage resources authority responsible for the area in which the development is proposed, is considered.

Please note that the activity may not commence prior to an environmental authorization being granted by the Department.

Yours sincerely

Ms Lize McCourt
Chief Director: Environmental Impact Management
Department of Environmental Affairs
Letter signed by: Ms Lené Grobbelaar
Designation: Assistant Director: Parastatals
Date: 25/09/09

25/09 '09 FRI 10:14 [TX/RX NO 82791



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PROOF

1. CHECK ALL DETAILS CAREFULLY
2. Indicate changes CLEARLY - mark with X
3. If 100% correct, sign below

Checked and certified correct:

Date:

PLEASE NOTE: By signing **YOU** accept responsibility
for **ANY** errors that might have been overlooked.



Dr Keith Kennedy
PhD Water Supply Vulnerability/Contaminant Migration
Manager - Water Resources

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