

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.

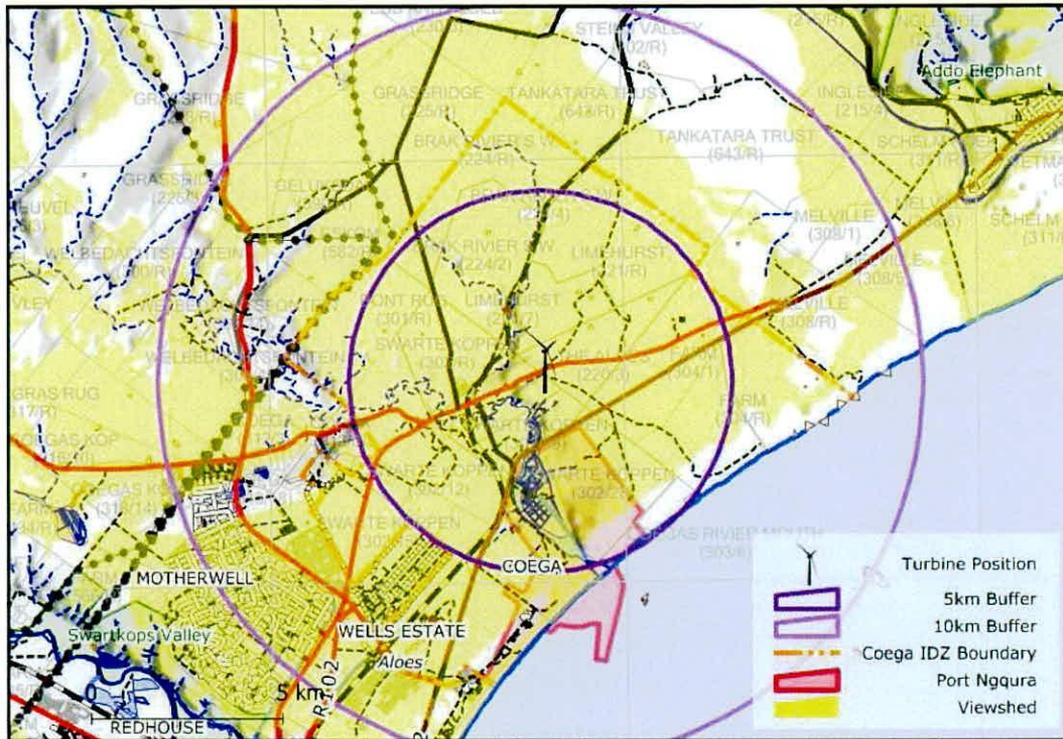


Figure 3.1 Viewshed of the proposed wind turbine (yellow colour indicates areas from which the turbine will be visible).

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	11.2.km
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.

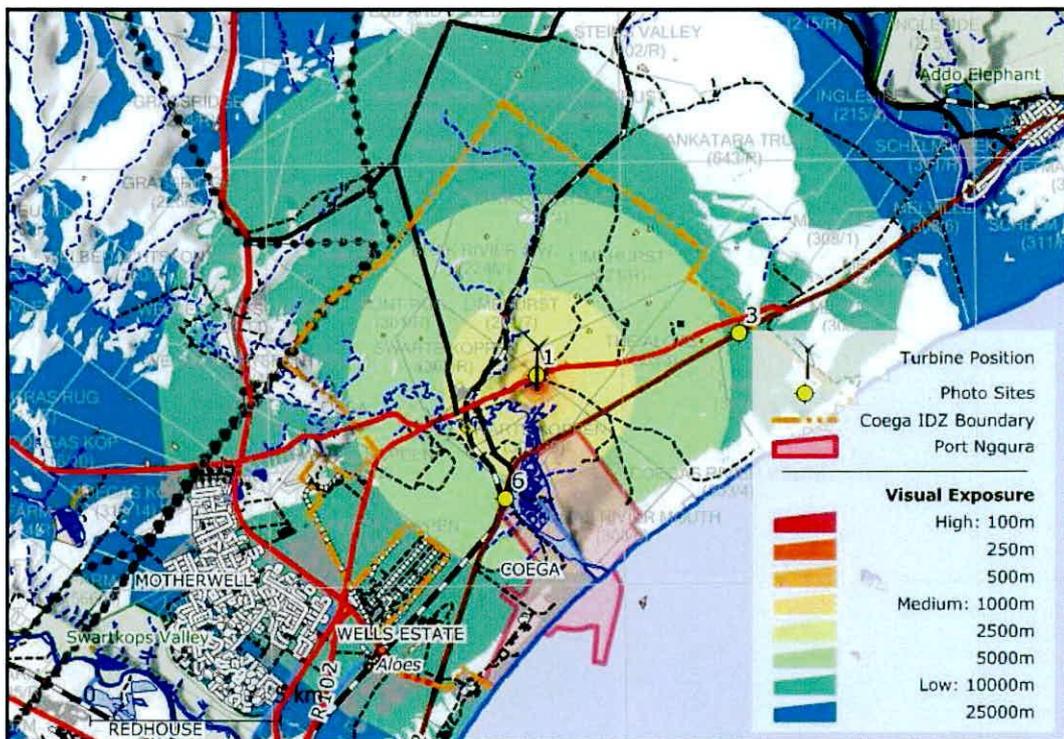


Figure 3.2 Visual exposure of the turbine. The colour range reflects the exponential nature of visual exposure – visual impact diminishes exponentially with distance.

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.

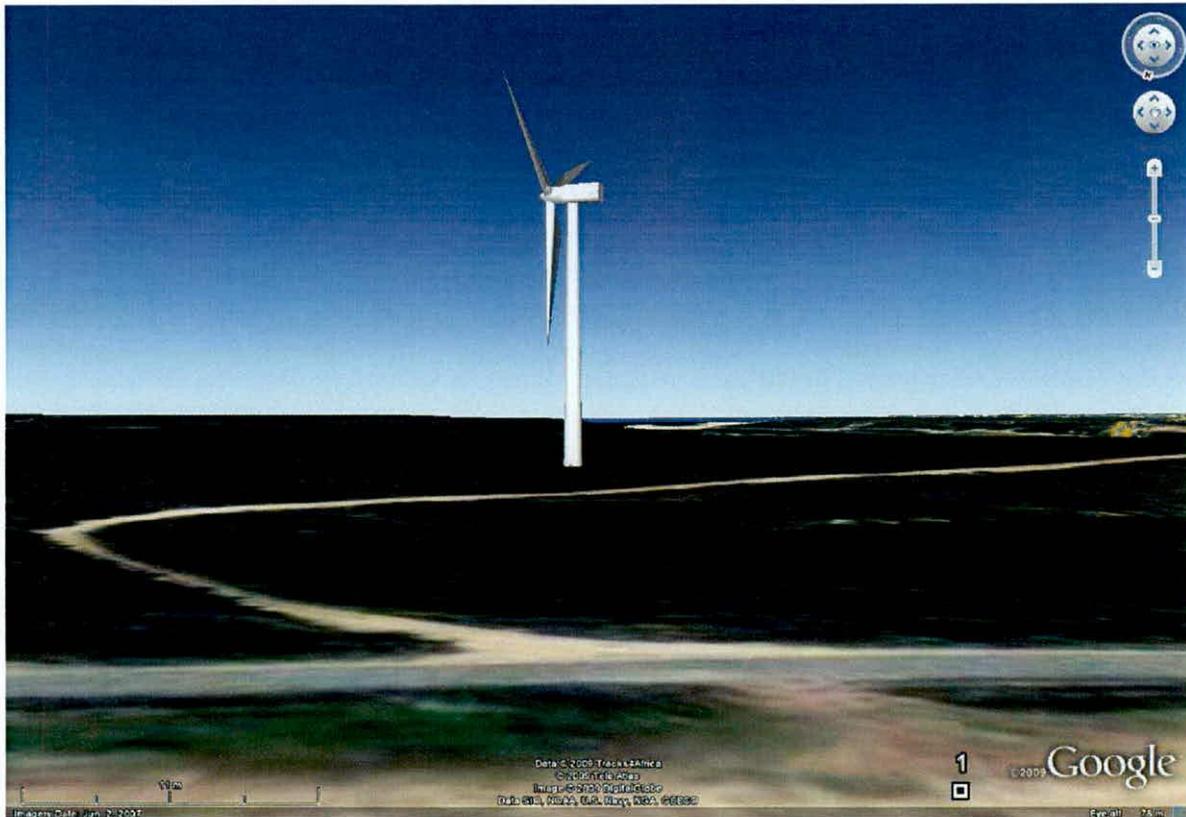


Figure 3.6 Google Earth image from Photo Site 1 shows the whole turbine. The view is from slightly higher than that of the photo in order to fit the turbine into the picture.

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.

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

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 BASIC ASSESSMENT REPORT FOR ELECTRAWINDS PROJECT AT COEGA – NOVEMBER 2009

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

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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
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Phone 041-374 8426 / Fax 041-373 2002 / Email sandy@publicprocess.co.za

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BASIC ASSESSMENT REPORT FOR ELECTRAWINDS PROJECT AT COEGA – NOVEMBER 2009

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

TITLE	FIRST NAME	LAST NAME	ORGANISATION	CAPACITY	INTEREST	ADDRESS 1	ADDRESS 2	TOWN	CODE	TELEPHONE	FAX	CELLPHONE	EMAIL
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Mr	Kous	Slabbert	NMBM	Air Quality	Local Authority		PO Box 11	Port Elizabeth	6000	041 506 5210	041 585 7261	079 490 0358	kslabbert@mandelametro.gov.za
Mr	Jerome	Kritzinger	NMBM	Waste Water	Local Authority		PO Box 11	Port Elizabeth	6000	041 506 5335			
Dr	Ane	Oosthuizen	SANParks	National Marine Coordinator	National Parks		PO Box 20419	Humewood	6013	041 508 5411		083 540 8200	Ane.Oosthuizen@nmmu.ac.za

SECTION F: APPENDICES
BASIC ASSESSMENT REPORT FOR ELECTRAWINDS PROJECT AT COEGA – NOVEMBER 2009

TITLE	FIRST NAME	LAST NAME	ORGANISATION	CAPACITY	INTEREST	ADDRESS 1	ADDRESS 2	TOWN	CODE	TELEPHONE	FAX	CELLPHONE	EMAIL
Ms	Thanduxo	Lungile	SAHRA		Provincial Authority		P.O. Box 759	East London	5200	043 722 1740	043 722 1749		tlungile@ec.sahra.org.za
Dr	Paul	Martin	CDC	ECO	CDC		PO Box 61029	Bluewater Bay	6212	041 4665698		073 252 4111	apmartin@global.co.za
Mr	Eric	Offerman	Algoa Brick	Managing Director	Adjacent Landowner		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	EAP Manager		PO Box 320	Stellenbosch	7599	021 888 2486	021 888 2693		plochner@csir.co.za
Ms	Christabel	Geland	EAP Manager	CSIR	EAP Leader		PO Box 320	Stellenbosch	7599	021 888 2486	021 888 2693		CGeland@csir.co.za
Ms	Jill	Manuel	NMBM	Environmental Sub Directorate/ CETT Committee	Local authority		P.O. Box 11	Port Elizabeth	6000	041 506 5630			jmanuel@mandelametro.gov.za
Mr	Donald	Mc Gillivray	Africoast	Project Engineers	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	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	NGO		PO Box 313	Darling	7345	022 492 3095	022 492 3096		office@AfriWEA.org;oelsnergrp@wcaccess.co.za
Mr	JA	van Eeden	Palmtree Power	CEO	Palmtree Power		PO Box 583	Harrismith	9880			082 773 8496	waterenergy5037@gmail.com
Ms	Lizell	Stroh	SA Civil Aviation Authority	Obstacle Specialist	Civil Aviation		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	Provincial Authority		P O Box 11100	Algoa Park	6005	041 452 2073	041 456 1666		wilma.snyman@dot.ecprov.gov.za
Mr	Vuyo	Tele	ATNS		PE Airport		PO Box 5360	Walmer	6065		041 501 5906		VuyoT@ATNS.co.za
Mr	Ernest	Grunewald	Dedisa Substation	Senior Consultant	Land and Rights		PO Box 1091	Johannesburg	2000	011 800 5732	0866557036	083 632 7668	Ernest.Grunewald@eskom.co.za
Mr	Alan	Southwood	DEDEA	Environmental Scientist	Provincial Authority		Private Bag X5001	Greenacres	6057	041 508 5813	086 519 7698		Alan.Southwood@deaet.escape.gov.za
Mr	Brendon	Watkiss	Setplan	Town Planner	Town Planning		PO Box 12703	Centrahil	6006	041 585 1788	041 585 1763		brendon@setplanpe.co.za
Mr	Doug	Jenman				PO Box 12546	Mill Street	Cape Town	8010			082 415 2515	doug.jenman@gmail.com
Mr	Johan	Minnaar	ATNS Company	Manager ATS	Aviation		PO Box 5360	Walmer	6065	041 501 5900	041 501 5957		johanm@atns.co.za
Ms	Kirsten	Jeske	The Matrix	Town Planner	Town Planning		PO Box 1737	Port Elizabeth	6000	041 582 1073	041 582 1083		kirsten@thematrixcc.co.za
Ms	Brigitte	Melly	Rhodes University	Student	Student	6 Brewer Road	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

SECTION F: APPENDICES
BASIC ASSESSMENT REPORT FOR ELECTRAWINDS PROJECT AT COEGA – NOVEMBER 2009

TITLE	FIRST NAME	LAST NAME	ORGANISATION	CAPACITY	INTEREST	ADDRESS 1	ADDRESS 2	TOWN	CODE	TELEPHONE	FAX	CELLPHONE	EMAIL
Dr	Mike	Cohen	CEN IEM Unit	Environmental Consultant	Environment	36 River Road	Walmer	Port Elizabeth	6070	041 581 2983	086 504 2549		steenbok@aerosat.co.za
Mr	Patrick	Cull	The Herald	Assistant Editor	Media		PO Box 5607	Walmer	6065			082 893 2870	pdhcull@iafrica.com
Mr	Robbie	Louw	Promethium Carbon		Carbon Credits		PO Box 131 253	Bryanston	2021			082 557 8646	Robbie@promethium.co.za
Ms	Viwe	Biyana	Coega Development Corporation	Project Manager SHEQ	CDC	Pbag X6009 32381		Port Elizabeth	6000	041 403 0400	041 403 0401	083 228 6872	viwe.biyana.coega.co.za
Cllr	TG	Vusani	NMBM Councillor	Councillor Ward 53	Ward Cllr	Mnqarhwan a Street		Kamvelihle	6211			071 7540261	
Mr	Peter	Neilson	NMBM	Electrical	Local Authority							082 577 4192	pneilson@mandelametro.gov.za
Mr	Tyron	Ferndale	NMBM		Local Authority								tferndale@mandelametro.gov.za
Mr	Andre	Otto	Dept of Minerals and Energy Room F508	Project Manager SA Wind Energy	National Government	Private Bag X59		Pretoria	0001	012 317 8428		828,770,128	andre.otto@dme.gov.za; freenrg@absamail.co.za
Mr	Emil	Unger	Electrawinds	Project Development Africa	Applicant							082 465 9825	emil@megatrade.co.za
Mr	Tijmen	Keesmaat	Electrawinds		Applicant								tijmen.keesmaat@electrawinds.be
Mr	Vukile	Menze	Dept of Labour		Provincial Authority							083 675 0063	
Mr	Mike	Keizer	SANRAL		Roads Agency							083 283 6136	kaiserm@nra.co.za
Ms	Aphiwe	Bewana	SANParks	Marine Intern	SANParks	PO Box 20419		Humewood	6013		041 508 5415	073 448 3651	aphiwe.bewana@nmmu.ac.za
Mr	Kevin	Minkoff	Private	Private	Private	7 Mackay St	Centrahill	Port Elizabeth	6006				kminkoff@gmail.com
Mr	Chris	Steyn	ATNS	Project Manager	ATNS	Greenways	Kusweg	Strand	7140	021 863 5564	086 694 1022	082 554 1456	nimble@iafrica.com
Ms	Ronel	Marx	J&M Project Management Services	Contracts Administration	Business	PO Box 1152		Hartenbos	6520	044 692 0355	086 659 8810	072 844 1088	ronel@jandm.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,

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: PRNATE 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 40days, 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 27698, Groenacres 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"/>	YES
<input type="checkbox"/>	NO

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

- ① If mast is situated within 100 metres of
 quarry D.M.E. must be involved. I hope not!
- ② Will new roads be built to site?
- ③ Map showing site not clear ~~enough~~
 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: ATN'S COMPANY	POSITION: MANAGER ATIS
POSTAL ADDRESS: P.O. Box 5360, WALTER	
CODE: 6065	
PHONE: 041 - 5015900	FAX: 041 - 5015957
CELL: —	EMAIL: Johanm@atn.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 NMBM 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 ~~the~~ ATIS ~~at~~ Coega. ATIS.

SEP.03.2009 11:44 0415857261

ENVIRO SERVICES

#2654 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: KOBS 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 4900 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 sandy@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@ccqa.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)**

E.7 CORRESPONDENCE SENT TO I&APS FOR THE REVIEW OF THE DRAFT BASIC ASSESSMENT REPORT

COPY OF LETTER 2 SENT TO I&APS FOR THE REVIEW OF THE DRAFT BASIC ASSESSMENT REPORT

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

8 October 2009

ADDRESS

Dear TITLE

RE: Notice of Comment Period: Draft Basic Assessment Report for the Proposed Wind Measuring Mast and Wind Test Turbine in the Coega IDZ near Port Elizabeth (DWEA EIA reference No: 12/12/20/1680)

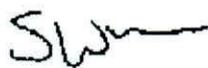
As a registered interested and affected party on the database for the above project this serves as notification of the 40 day review period for the Draft Basic Assessment Report for the proposed wind measuring mast and wind test turbine in the Coega IDZ near Port Elizabeth, NMBM. Comments on the Draft Basic Assessment Report should be submitted to Public Process Consultants (contact details above) by no later than **18 November 2009**.

In order to assist you in making your comments please find attached an Executive Summary of the DRAFT Basic Assessment Report as well as a comment form. A copy of the full report may be downloaded from the following project website www.publicprocess.co.za

The next stage in the Basic Assessment Process entails compiling and including the comments received during this comment period for consideration in the finalising of the Basic Assessment Report for submission to the National Department of Water and Environmental Affairs (DWEA) for their decision making. You will be notified in writing of the outcome of the decision making process and appeal period.

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

Environmental Assessment Project Leader



COPY OF THE COMMENT FORM MAILED TO I&APS ON THE 8 OCTOBER 2009

PUBLIC INVOLVEMENT PROCESS REPLY FORM

DRAFT BASIC ASSESSMENT COMMENT FORM

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

Listed Activity: GN R386 Activity 14.

Return Completed Reply Form by 18 November 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:	SURNAME:
ORGANISATION:	POSITION:
POSTAL ADDRESS:	
CODE:	
PHONE:	FAX:
CELL:	EMAIL:

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

**COPY OF THE EXECUTIVE SUMMARY SENT TO I&APS FOR THE REVIEW OF THE DRAFT
BASIC ASSESSMENT REPORT**

SUMMARY

Electrawinds NV, a Belgium-based company, intend to invest in wind energy in the Coega Industrial Development Zone (IDZ), near Port Elizabeth. They are proposing to implement their project in two phases, the first of which comprises the establishment of a 60 m wind measuring mast and a single 2.3 megawatt (MW) wind turbine. The monitoring mast would be operational for 12 months and the data collected would inform further planning and investment decisions. The wind turbine is expected to operational for at least 20 years. Both the mast and turbine are included in this Basic Assessment.

The main positive and negative impacts are summarised below:

Sourcing of wind data and promotion of wind energy

Although the actual generation capacity of the single turbine is small (2.3 MW), it will demonstrate tangible progress towards the development of renewable energy sources for the Nelson Mandela Bay Municipality (NMBM). The project could showcase the NMBM as a leader in renewable energy, for example, during the 2010 FIFA World Cup. The effect of the project in promoting the use of wind energy is predicted to have a positive impact of low significance.

Visual impact and effect on "sense of place"

The wind turbine will be 100 m tall (from ground to hub height) with three blades each 50 m long. Given its location on the coastal plateau of the Coega IDZ, it will be visible from within the IDZ and immediate surrounds. It will therefore have an effect on the sense of place of the area. The turbine site is in the midst of the IDZ. As the IDZ develops around the turbine, the turbine will have less effect on the sense of place. Other prominent features near the turbine site, such as the Eskom Dedisa 400 kV substation and several high capacity power lines that cross the IDZ nearby, already give the area an industrial character. It is recognised that the visual impact of a wind turbine is a subjective matter. Given the location of the turbine within an industrial zone, and that it indicates progress towards using renewable energy in South Africa, the visual impact is predicted to be positive and of medium significance.

Impact of vegetation clearing and habitat loss

The project requires clearing of an area of approximately 2000 m² for permanent features such as foundations, roads and hard standing areas for cranes. This impact would be for the duration of the project (20 years). In addition, for the wind monitoring mast an area of approximately 1600 m² needs to have vegetation trimmed to a height of 10 cm above ground in order to lay out the mast and stays prior to erection. Prior to construction, any species of special concern should be collected and placed in a nursery. Given the above factors and the context of the project within an IDZ, the negative impact of the project on habitat loss is of low significance.

Impacts on birds

It is recommended that bird anti-collision devices be placed on the stays of the monitoring mast, which is operational for 12 months. Given this recommendation, and that larger birds tend to avoid turbines, the negative impact of the project on birds is predicted to be of low significance.

Concluding statement

Provided that the recommended management actions are implemented effectively, the proposed Electrawinds wind monitoring mast and single turbine are assessed to provide a net positive contribution to sustainability.

E.8 COMMENTS ON THE DRAFT BASIC ASSESSMENT REPORT RECEIVED FROM I&APs

COPIES OF COMMENTS RECEIVED FROM I&APS DURING THE REVIEW OF THE DRAFT BASIC ASSESSMENT REPORT.

DRAFT BASIC ASSESSMENT COMMENT FORM

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

Listed Activity: GN R386 Activity 14.

Return Completed Reply Form by 18 November 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:	APHIWE	SURNAME:	BEWANA
ORGANISATION:	SANParks	POSITION:	MARINE INTERN
POSTAL ADDRESS:	P.O. Box 20419 Humewood 6013, P.E.		
CODE:	6013		
PHONE:		FAX:	041 508 5415
CELL:	0734483651	EMAIL:	aphiwe.bewana@nmmu.ac.za

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

Attached comments from Aphiwe Bewana, SANParks

The Electrawinds project is proposed to be implemented in two phases, and the first stage comprises of the establishment of wind measuring mast and single 2.3 megawatts wind turbine. The draft report states that the complete Electrawinds project proposes to produce an estimated 57.5 megawatts, which will contribute towards 10% of renewable energy of the NMMM. However, the Basic Assessment only focused on the first phase [measuring mast and turbine]. This assessment reasonably indicates that generally, there will be negative impact of low significance to the natural environment due to the construction and operation of the wind mast and turbine.

Our comments hugely relate to the potential impacts of the whole project rather than limited to the first phase. We assume that it is may be the overall impact of the entire project that may have high negative impact on the environment rather the first phase. Here, we would like further assessments to consider the following when selecting future sites for wind turbine:

- I. To avoid conservation priority areas [important areas which harbour unique and endemic flora and fauna].
- II. To avoid breeding, wintering and migration sites for birds.
- III. Chose sites that will have low impact to habitat loss and/or displacement of fauna (birds, small mammals) due to disturbance.
- IV. Choosing of sites should consider the cumulative effect of noise pollution that will be caused by turbine, particularly those areas that may not be within an industrial area.
- V. We are also concerned about the proximity of wind turbine to the coastline of Algoa bay, as noise pollution may negatively impact on marine mammals, as this is relatively shallow bay.
- VI. There must be consideration of visual pollutions as well.

Below are some of the examples of best practice measures:

- (1) Ensuring that key areas of conservation importance and sensitivity are avoided;
- (2) Implementing appropriate working practices to protect sensitive habitats;
- (3) Providing adequate briefing for site personnel and, in particularly sensitive locations, employing an on-site ecologist during construction;
- (4) Implementing an agreed post-development monitoring programme through planning or license conditions;
- (5) Sitting turbines close together to minimize the development footprint (subject to technical constraints such as the need for greater separation between larger turbines);
- (6) grouping turbines to avoid alignment perpendicular to main flight paths and to provide corridors between clusters, aligned with main flight trajectories, within large wind farms;
- (7) Increasing the visibility of rotor blades – research indicates that high contrast patterns might help reduce collision risk (at least in conditions of good visibility (Mclsaac 2001)), although this may not always be acceptable on landscape grounds. Another suggested, but untested possibility is to paint blades with UV paint, which may enhance their visibility to birds;

- (8) Where possible, installing transmission cables underground (subject to habitat sensitivities and in accordance with existing best practice guidelines for underground cable installation);
- (9) Marking overhead cables using deflectors and avoiding use over areas of high bird concentrations, especially for species vulnerable to collision;
- (10) Timing construction to avoid sensitive periods;
- (11) Implementing habitat enhancement for species using the site; and
- (12) Offshore, carefully timing and routing maintenance trips to reduce disturbance from boats, helicopters and personnel.

From: Chris Steyn [nimble@iafrica.com]
Sent: 13 October 2009 07:40 AM
To: sandy@publicprocess.co.za
Cc: 'Peter Marais'; Carel Gersbach; Johan Minnaar
Subject: Electrawinds Coega Draft Basic Assessment Comments dated 13 Oct 2009.doc
Attachments: Electrawinds Coega Draft Basic Assessment Comments dated 13 Oct 2009.doc

Dear Sandy

Please find attached some comments from a surveillance point of view. I am sure there will be other comments and or recommendations from ATNS and SACAA and you are requested to solicit their comments as the current suggested EIA process is a concern.

Yours truly,

Chris Steyn

Nimble Consulting Services CC
Telephone: +27 21 853 5564
Fax: +2786 684 1022

PUBLIC INVOLVEMENT PROCESS REPLY FORM

DRAFT BASIC ASSESSMENT COMMENT FORM

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

Listed Activity: GN R386 Activity 14.

Return Completed Reply Form by 18 November 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: <u>Chris</u>	SURNAME: <u>Steyn</u>
ORGANISATION: <u>ATNS</u>	POSITION: <u>Project Manager</u>
POSTAL ADDRESS: <u>Greenways, Kusweg, Strand</u>	
CODE: <u>7140</u>	
PHONE: <u>+27218635564</u>	FAX: <u>0866941022</u>
CELL: <u>+27825541456</u>	EMAIL: <u>nimble@iafrica.com</u>

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

The wind turbine may interfere with the approach radar at PE Airport as it is in direct line of sight of the radar. False targets may be generated in the approach airspace which may lead to confusion of the controllers. There may also be loss of sensitivity and thus loss of real aircraft targets around the area of the wind turbine and behind the wind turbine seen from the radar.

The concern is that, should the single demonstrator be installed and it performs well from a wind turbine point of view, there will be pressure to construct a full wind farm which may have greater impact when air safety, procedures and surveillance are considered.

The EIA Assessment should be done for the eventual 'complete wind farm' as performing it for one turbine and then be stopped from developing the full wind farm for may be many other reasons does not make sense at all and seems like a foot in the door approach which may backfire.

It is therefore kindly requested that a full assessment be conducted for the impact of the potential complete wind farm as the current approach is not in all the stakeholders' interest. This assessment should include the possible impact on surveillance, navigation aids, approach procedures for the airport and future developments planned at the airport and possible mitigations should there be any.

Registration and comments form for Issues & Concerns

From: Kevin Minkoff [kminkoff@gmail.com]
Sent: 03 November 2009 11:19 AM
To: Sandy Wren
Subject: Re: I&AP - Electrawinds in Coega

Sure, it's:

77 Mackay street
Richmond Hill
Port Elizabeth 6006

Regards,

Kevin
2009/11/3 Sandy Wren <sandy@publicprocess.co.za>
Kevin

Attached please find an executive summary of the Draft Basic Assessment Report as well as a comment form.

Would you please email me your address details so that we can place you on the project database.

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: Kevin Minkoff [mailto:kminkoff@gmail.com]
Sent: 02 November 2009 12:25 PM
To: sandy@publicprocess.co.za
Subject: I&AP - Electrawinds in Coega

Good day Sandy,

I would like to register as an I&AP for the development of the wind farm project in Coega led by Electrawinds.
Thank you to keep me updated on the process.

Kind regards,

Kevin MINKOFF
Port Elizabeth

From: Mike Cohen [steenbok@aerosat.co.za]
Sent: 14 October 2009 07:06 AM
To: 'Sandy Wren'
Subject: RE: Electrawinds Draft Basic Assessment for Public Review

Hi Sandy

I would recommend that the potential impacts on birds and bats are addressed in more detail.

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
Please consider the environment before printing this email

From: Paul Martin [pmartin@axxess.co.za]
Sent: 22 October 2009 11:05 PM
To: Sandy J Wren
Subject: Electrawinds & various

Sandy,

1. Electrawinds Draft BAR comment:

In preparation for the proposed wind turbine farm, the single turbine during this 1st phase is an ideal opportunity to test what the noise levels are at certain distances from the turbine, check on a regular basis to see whether there are any bat or bird fatalities around the structure and test public opinion on the visual aspects. These monitoring aspects could be included as part of the conditions to ensure that there is data in place ahead of the proposed 2nd phase.

If possible, can you email me notifications of EIAs, etc rather than posting them. Thanks for automatically including me as an I&AP for Coega related projects.

Dr Paul Martin
Environmental Control Officer
Coega IDZ / Port of Ngqura
PO Box 61029
Bluewater Bay 6212
Tel: 041 4665698
Cell: 0732524111
email: pmartin@axxess.co.za

From: Ronel Marx [ronel@jandm.co.za]
Sent: 30 September 2009 11:34 AM
To: sandy@publicprocess.co.za
Subject: Windfarm project - Coega

Importance: High

Sirs:

We note the anticipated construction of a WindFarm Project in the Port Elizabeth area with interest.

Could you advise whether you will be outsourcing on this project as we are interested in offering our services as Project Managers in all disciplines. Should you require information regarding our company - please let me know.

Kind Regards

Ronel Marx
Contracts Administration
J&M Project Management Services cc
T: 27 44-6920355
F: 086 659 8810
C: 072 844 1088

From: Viwe Biyana [Viwe.Biyana@coega.co.za]
Sent: 09 November 2009 12:47 PM
To: Paul Lochner; CGeland@csir.co.za
Cc: sandy@publicprocess.co.za; Andrea Von Holdt
Subject: Electrawind DRAFT BAR -Comments
Attachments: ELC members - Sept 2009.pdf

Dear All

Below is the list of comments for the Electrawind BAR , please note that Nelisa Ndulama and Primrose Madikizela are no longer members of the ELC and I have attached the updated list.

1. What are the exclusions around the wind turbine? What can the land around the turbine be utilized for?
2. Google Map on front cover of BAR indicates incorrect position of wind measuring mast.
3. Pg 4, 1st Paragraph of summary: Add the word "be". The wind turbine is expected to be operational.
4. Check: need to indicate in which vegetation habitat the project occurs.
5. Pg 7, sections 1 & 2: Replace NMMM with NMBM. Same applies for the remainder of the report.
6. Pg 7, section 2, 4th bullet: Quarry is west of proposed wind turbine site.
7. Pg 7, section 1, last sentence of 1st paragraph: Replace Appendix F with Appendix G.
8. Pg 7, section 2, 6th bullet: Replace Appendix F with Appendix A.
9. Pg 7, section 2: Were location alternatives considered? i.e. IDZ vs locations outside.
10. Pg 8, section 2, Grid connection alternatives, bullet ii: insert the word "part" into last sentence: "gully which forms part of...".
11. Section 3 of the BAR is missing.
12. Pg 8, section 4: co-ordinates may change as a result of site locality optimization.
13. Pg 9, section 6
14. Pg 14, section 13b states that the wind mast data will be used to inform further planning of phase 2 of Electrawind's project if the EIA for phase 2 is about to commence, how can/will the wind data be used?
15. Pg 17, section 3: it is mentioned that recent versions of the CDC's OSMP have been consulted. At this point in time, the SOMP is being revised, however the correct % authorized version is the SOMP dated 2003, and rev. 10 of the map, which was approved as part of the change in land use EIA for the remainder of the IDZ.
16. Pg 18, section 5: "Natural area" has been crossed out; however it is prudent to label the CDC's Open Space areas as "Natural Areas".

17. Pg 19, section 5: Also mention the proximity of the N2, which is in 500m of the monitoring mast and is currently being upgraded to 4 lanes.
18. Pg 22, section 6: An HIA wasn't conducted for the IDZ, either as part of the rezoning EIA's or the development of the OSMP, however it is correct to state that our graveyards in the IDZ have been identified and fenced. A comprehensive HIA for the entire IDZ will be conducted during 2010.
19. Pg 24, section 1c: No sure what id "Cluster H". Rather refer to the sites being in zone 9.
20. Pg 27, section 2iii: the proposed 150m gravel may be shortened as a result of site locality optimization.
21. Pg 31, section 1i: Linda Redfern doesn't run the nursery in the IDZ; better to say she runs the nursery for the CDC and it is located outside of the IDZ. Mention is made of species of special concern. Are there such species on the site? If so, suggest listing them.

E.9 COMMENTS AND RESPONSES REPORT FOR THE DRAFT BASIC ASSESSMENT REPORT

This section contains a summary of comments received from stakeholders on the Draft Basic Assessment Report, together with responses from Electrawinds and/or the CSIR EIA team.

1. POTENTIAL IMPACTS ON CIVIL AVIATION

	Issue	Commentator	Date	Response from Electrawinds and/or the CSIR EIA team
1.1	The wind turbine may interfere with the approach radar at PE Airport as it is in direct line of sight of the radar. False targets may be generated in the approach airspace which may lead to confusion of the controllers. There may also be loss of sensitivity and thus loss of real aircraft targets around the area of the wind turbine and behind the wind turbine seen from the radar.	<i>Chris Steyn, ATNS, Project Manager</i>	13Oct09, email and attachment	<i>Response from CSIR:</i> This is a valid concern as radar acquisition and control of aircraft travelling into and out of FAPE airspace tend to be under radar control in TMA and (and to a lesser extent) in CTR zones where they are handed over to the Tower. Radar control is even more important in IMC (bad weather) conditions where aircraft have to be guided into and out of the FAPE ATZ, as shown in Figure A-7 in Appendix A in Section F. The proposed location of the turbine and monitoring mast is just inside the TMA zone at the northern TMA/CTR boundary. Importantly it is well away from the FAPE circuit and is not located within 10 miles of the east west orientated FAPE runway. There are many precedents in other parts of the world where wind turbines operate safely very close to busy international airports where radar approach is a factor (Copenhagen International in Denmark is a case in point). Research on the impact of turbines on radar is receiving international attention, with new technologies being developed in countries such as the United Kingdom to enable radar systems to discern between turbines and aircraft. For the Electrawinds phase 2 project (25 turbines) we recommend that a technical specialist study be conducted on the potential impact of the turbines on radar. (For the general reader, the CTR zone applies from ground-level to 2000 feet, and the TMA zone applies from 2500 feet to 12 500 feet).
1.2	The concern is that, should the single demonstrator be installed and it performs well from a wind turbine point of view, there will be pressure to construct a full wind farm which may have greater impact when air safety, procedures and surveillance are considered.	<i>Chris Steyn, ATNS, Project Manager</i>	13Oct09, email and attachment	<i>Response from CSIR:</i> The impacts of the phase 2 project (25 turbines) on air safety and radar surveillance will need to be considered as part of a full EIA process. This will include consultation with the Civil Aviation Authority. The phase 2 project will need separate environmental authorization.
1.3	The EIA Assessment should be done for the eventual 'complete wind farm' as performing it for one turbine and then be stopped from developing the full wind farm for may be many other reasons does not make sense at all and seems like a foot in the door approach which may backfire. It is therefore kindly requested that a full assessment be	<i>Chris Steyn, ATNS, Project Manager</i>	13Oct09, email and attachment	<i>Response from CSIR:</i> As mentioned above, a full EIA will be conducted for the phase 2 project (925 turbines). It is recommended that this EIA should include a technical specialist study on the potential impact of the turbines on radar surveillance, navigation aids and approach procedures for PE Airport, and possible mitigation measures, if any.

	<p>conducted for the impact of the potential complete wind farm as the current approach is not in all the stakeholders' interest.</p> <p>This assessment should include the possible impact on surveillance, navigation aids, approach procedures for the airport and future developments planned at the airport and possible mitigations should there be any.</p>			<p>In terms of project planning and investment, the single turbine provides a valuable test case for Electrawinds that enables them to better understand both environmental and technical challenges associated with the project, before potentially embarking on a substantially larger investment in phase 2.</p>
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2. AVIFAUNA AND BAT RELATED IMPACTS

#	Issue	Commentator	Date	Response
2.1	I would recommend that the potential impacts on birds and bats are addressed in more detail.	<i>Mike Cohen, CEN IEM</i>	14Oct09, email	<p><i>Response from CSIR:</i> In South Africa, there is very limited knowledge on the impacts of turbines on birds and bat species. International experience shows that birds tend to avoid the turbines. The stays associated with the monitoring mast are more of a collision risk for birds such as raptors, bustards and cranes. Best practice is to install Bird Flight Diverters (BFDs) to improve the visibility of the stays for birds, and reduce the risk of collisions. However, the concern raised from a technical perspective is that the BFDs could interfere with the quality of the wind data.</p> <p>It should also be noted, as suggested by Paul Martin (comment 2.2. below), that the single turbine and mast provide a valuable opportunity to monitor the impacts on birds and bats, within the context of an IDZ.</p>
2.2	In preparation for the proposed wind turbine farm, the single turbine during this 1st phase is an ideal opportunity to check on a regular basis to see whether there are any bat or bird fatalities around the structure and test public opinion on the visual aspects. These monitoring aspects could be included as part of the conditions to ensure that there is data in place ahead of the proposed 2nd phase.	<i>Paul Martin, ECO Coega IDZ and Port</i>	22Oct09, email	<p><i>Response from CSIR:</i> Agreed. This monitoring recommendation has been incorporated in the section on "Proposed management of impacts" under the <i>Operational Phase</i> (in Section 6 in Section E of the Application Form).</p>

3. VISUAL IMPACTS OF CONCERN

#	Issue	Commentator	Date	Response
3.1	In preparation for the proposed wind turbine farm, the single turbine during this 1st phase is an ideal opportunity to test public opinion on the visual aspects. These monitoring aspects could be included as part of the conditions to ensure that there is data in place ahead of the proposed 2nd phase.	<i>Paul Martin, ECO Coega IDZ and Port</i>	22Oct09, email	<p><i>Response from CSIR:</i> The visual impact of the turbines is a subjective issue. As part of the full EIA, a visual specialist study will be undertaken, that uses Visual Impact Assessment techniques such as mapping the Zone of Visual Influence. However, public opinion on the visual impact will remain subjective.</p>

				Furthermore, the visibility of the turbines also presents us with an inherent conflict: to make the turbines as visible as possible to minimize risk of bird collisions and improve aircraft safety; or to reduce the visibility of turbines to minimize the visual impact on the landscape.
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4. NOISE RELATED IMPACTS OF CONCERN

	Issue	Commentator	Date	Response
4.1	In preparation for the proposed wind turbine farm, the single turbine during this 1st phase is an ideal opportunity to test what the noise levels are at certain distances from the turbine. These monitoring aspects could be included as part of the conditions to ensure that there is data in place ahead of the proposed 2nd phase.	<i>Paul Martin, ECO Coega IDZ and Port</i>	22Oct09, email	<i>Response from CSIR:</i> Agreed. This monitoring recommendation has been incorporated in the section on "Proposed management of impacts" under the <i>Operational Phase</i> (in Section 6 in Section E of the Application Form).

5. EIA AND PUBLIC PARTICIPATION ISSUES OF CONCERN

	Issue	Commentator	Date	Response
5.1	I would like to register as an I&AP for the development of the wind farm project in Coega led by Electrawinds.	<i>Kevin Minkoff, private</i>	2Nov09, email	This I&AP was placed on the project database and sent copies of available project information.

6. EDITORIAL COMMENTS ON THE DRAFT BAR

	Issue	Commentator	Date	Response
6.1	What are the exclusions around the wind turbine? What can the land around the turbine be utilized for?	<i>Viwe Biyana, CDC, Project Manager SHEQ</i>	9Nov09, email	<i>Response from Electrawinds:</i> There are no specific references or guidelines from the European Wind Energy Association (EWEA) or another European institute describing what kind of activities are allowed around a wind turbine, or what activities are excluded. It is a matter of respecting the general safety regulations. For example, there are wind turbines installed within an oil refinery at Rotterdam Harbour. Other wind turbines are in agricultural areas, where cows are grazing at the bottom of the tower. Sometimes wind farm areas are fenced off, normally, however public, can get to the bottom of the tower. Electrawinds would not favour another large structure (e.g. chimney of 100 meters or any other tall building) being installed close to the wind turbine, because the wind profile would be influenced (reduced) by that. In the Netherlands and Belgium, we do have certain distances to respect with regards to gas pipe lines, power lines and highways. Setbacks differ from country to county, but generally speaking the following set backs are used: Houses and residential areas (not being offices and work places) 500m, Highways + power lines: tip height + 10 meters. No specific regulations or setbacks

SECTION F: APPENDICES
BASIC ASSESSMENT REPORT FOR ELECTRAWINDS PROJECT AT COEGA – NOVEMBER 2009

	Issue	Commentator	Date	Response
				are required to offices and work places.
6.2	Google Map on front cover of BAR indicates incorrect position of wind measuring mast.			<i>Response from CSIR:</i> Noted and corrected.
6.3	Pg 4, 1 st Paragraph of summary: Add the word "be". The wind turbine is expected to <u>be</u> operational.			<i>Response from CSIR:</i> Noted and corrected.
6.4	Check: need to indicate in which vegetation habitat the project occurs.			<i>Response from CSIR:</i> The turbine and mast are located outside of the open space areas included in the Coega Open Space Plan (OSP). The nearest areas of the OSP (i.e. riverine slopes leading down to the Coega River) are a combination of Sundays Thicket and Sundays Valley Thicket vegetation.
6.5	Pg 7, sections 1 & 2: Replace NMMM with NMBM. Same applies for the remainder of the report.			<i>Response from CSIR:</i> Done.
6.6	Pg 7, section 2, 4 th bullet: Quarry is west of proposed wind turbine site.			<i>Response from CSIR:</i> Noted and corrected.
6.7	Pg 7, section 1, last sentence of 1 st paragraph: Replace Appendix F with Appendix G.			<i>Response from CSIR:</i> Noted and corrected.
6.8	Pg 7, section 2, 6 th bullet: Replace Appendix F with Appendix A.			<i>Response from CSIR:</i> Noted and corrected.
6.9	Pg 7, section 2: Were location alternatives considered? i.e. IDZ vs locations outside.			<i>Response from Electrawinds:</i> We have considered more sites. And we will continue to find new locations in South Africa to develop clean and green projects. The IDZ of Coega however was chosen as our first project for a number of reasons. First of all the area is an industrial zone under development. We prefer to combine our industrial activity with already existing industrial activities, to minimize disturbance of untouched areas. The design of the wind farm can be integrated in the development of the whole Industrial Zone. Moreover, the combination of the industrial (energy intensive) activities in the harbour area and the production of green energy is a very logical one. Both are large scale industrial activities, one is using electricity, the other is producing it in a clean and green way. The site is also close to the ocean, ensuring high enough wind speeds for an economical operation of the wind farm. Another reason is the fact that the infrastructure both civil and electrical is already present in the IDZ. Last but not least, we have found in the Coega Development Corporation a fantastic partner assisting us in the permitting process.
6.10	Pg 8, section 2, Grid connection alternatives, bullet ii: insert the word "part" into last sentence: "gully which forms <u>part</u> of...".			<i>Response from CSIR:</i> Noted and corrected.
6.11	Section 3 of the BAR is missing.			<i>Response from CSIR:</i> There is no Section 3 in the template form obtained from the DEAT website.

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BASIC ASSESSMENT REPORT FOR ELECTRAWINDS PROJECT AT COEGA – NOVEMBER 2009

	Issue	Commentator	Date	Response
6.12	Pg 8, section 4: co-ordinates may change as a result of site locality optimization.			<i>Response from CSIR:</i> Agreed. A note has been added to the Final BA Report that the coordinates may change as a result of final micro-siting studies. However, such minor changes will not affect the impact significance presented in this BAB Report, provided the physical project footprint remains outside the Coega Open Space Plan.
6.13	Pg 14, section 13b states that the wind mast data will be used to inform further planning of phase 2 of Electrawind's project if the EIA for phase 2 is about to commence, how can/will the wind data be used?			<i>Response from Electrawinds:</i> The data from the wind mast will definitely be used at the investment decision for the full wind farm. We are starting up the development of the second phase because it is a lengthy process. And we want to do things parallel not to waste any time. The EIA is part of the development phase of the project. We are taking the risk on the development budget. We will however certainly wait with ordering the wind turbines for tens of millions of Euros before we are absolutely certain that the wind speed is high enough to make the project feasible.
6.14	Pg 17, section 3: it is mentioned that recent versions of the CDC's OSMP have been consulted. At this point in time, the OSMP is being revised, however the correct % authorized version is the OSMP dated 2003, and rev. 10 of the map, which was approved as part of the change in land use EIA for the remainder of the IDZ.			<i>Response from CSIR:</i> Noted.
6.15	Pg 18, section 5: "Natural area" has been crossed out; however it is prudent to label the CDC's Open Space areas as "Natural Areas".			<i>Response from CSIR:</i> Point noted. The Application Form has been revised, given that natural vegetation in the Open Space area may occur within 500m of the proposed sites for the turbine and monitoring mast.
6.16	Pg 19, section 5: Also mention the proximity of the N2, which is in 500m of the monitoring mast and is currently being upgraded to 4 lanes.			<i>Response from CSIR:</i> Noted. The Application Form has been revised.
6.17	Pg 22, section 6: An HIA wasn't conducted for the IDZ, either as part of the rezoning EIA's or the development of the OSMP, however it is correct to state that our graveyards in the IDZ have been identified and fenced. A comprehensive HIA for the entire IDZ will be conducted during 2010.			<i>Response from CSIR:</i> Noted and the BA Report has been updated accordingly.
6.18	Pg 24, section 1c: No sure what id "Cluster H". Rather refer to the sites being in zone 9.			<i>Response from CSIR:</i> Done.
6.19	Pg 27, section 2iii: the proposed 150m gravel may be shortened as a result of site locality optimization.			<i>Response from CSIR:</i> Noted and the BA Report has been updated.
6.20	Pg 31, section 1i: Linda Redfern doesn't run the nursery <u>in</u> the IDZ; better to say she runs the nursery for the CDC and it is located outside of the IDZ. Mention is made of species of special concern. Are there such species on the site? If so, suggest listing them.			<i>Response from CSIR:</i> Noted and corrected.

7. GENERAL COMMENTS

	Issue	Commentator	Date	Response
7.1	We note the anticipated construction of a Wind Farm Project in the Port Elizabeth area with interest. Could you advise whether you will be outsourcing on this project as we are interested in offering our services as Project Managers in all disciplines.	<i>Ronel Marx, J&M Project Management Services</i>	30Sep09, email	<i>Response from PPC:</i> The contact details of the commentator were forwarded to the client for their consideration.

8. COMMENTS RELATING TO THE PHASE 2 ELECTRAWINDS PROJECT AT COEGA

	Issue	Commentator or	Date	Response
8.1	<p>The Electrawinds project is proposed to be implemented in two phases, and the first stage comprises the establishment of a wind measuring mast and single 2.3 megawatt wind turbine. The draft report states that the complete Electrawinds project proposes to produce an estimated 57.5 megawatts, which will contribute towards 10% of renewable energy of the NMMM. However, the Basic Assessment only focused on the first phase [measuring mast and turbine]. This assessment reasonably indicates that generally, there will be negative impacts of <u>low significance</u> to the natural environment due to the construction and operation of the wind mast and turbine.</p> <p>Our comments hugely relate to the potential impacts of the whole project rather than limited to the first phase. We assume that it may be the overall impact of the entire project that may have high negative impacts on the environment rather than the first phase. Here, we would like further assessments to consider the following when selecting future sites for wind turbines:</p> <ul style="list-style-type: none"> • To avoid conservation priority areas [important areas which harbour unique and endemic flora and fauna]. • To avoid breeding, wintering and migration sites for birds. • Chose sites that will have low impact to habitat loss and/or displacement of fauna (birds, small mammals) due to disturbance. • Choosing of sites should consider the cumulative effect of noise pollution that will be caused by turbine, particularly those areas that may not be within an industrial area. • We are also concerned about the proximity of wind turbine to the coastline of Algoa bay, as noise pollution may negatively impact on marine mammals, as this is a relatively shallow bay. • There must be consideration of visual pollutions as well. 	<i>Aphiwe Bewana, Marine Intern, SANParks</i>	10Nov09, email and attachment	<p><i>Response from CSIR:</i> Thank you for your concurrence that the first phase of the project (single turbine and monitoring mast) is predicted to result in an impact of low significance.</p> <p>We will carry forward your comments on the phase 2 project (25 turbines) into the Full EIA process, which commenced in November 2009.</p>

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 BASIC ASSESSMENT REPORT FOR ELECTRAWINDS PROJECT AT COEGA – NOVEMBER 2009

Issue	Comment or	Date	Response
<p>Below are some of the examples of best practice measures:</p> <ul style="list-style-type: none"> (1) Ensuring that key areas of conservation importance and sensitivity are avoided; (2) Implementing appropriate working practices to protect sensitive habitats; (3) Providing adequate briefing for site personnel and, in particularly sensitive locations, employing an on-site ecologist during construction; (4) Implementing an agreed post-development monitoring programme through planning or license conditions; (5) Siting turbines close together to minimize the development footprint (subject to technical constraints such as the need for greater separation between larger turbines); (6) grouping turbines to avoid alignment perpendicular to main flight paths and to provide corridors between clusters, aligned with main flight trajectories, within large wind farms; (7) Increasing the visibility of rotor blades – research indicates that high contrast patterns might help reduce collision risk (at least in conditions of good visibility (McIsaac 2001)), although this may not always be acceptable on landscape grounds. Another suggested, but untested possibility is to paint blades with UV paint, which may enhance their visibility to birds; (8) Where possible, installing transmission cables underground (subject to habitat sensitivities and in accordance with existing best practice guidelines for underground cable installation); (9) Marking overhead cables using deflectors and avoiding use over areas of high bird concentrations, especially for species vulnerable to collision; (10) Timing construction to avoid sensitive periods; (11) Implementing habitat enhancement for species using the site; and (12) Offshore, carefully timing and routing maintenance trips to reduce disturbance from boats, helicopters and personnel. 			

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 Alcyon Road & Zibuko Street, Zone 1, Coega IDZ, Port Elizabeth, 6190
Coega Development Corporation, P/B X5099, Port Elizabeth, 6000, South Africa
Tel: +27 (0) 41 403 0400 • Fax: +27 (0) 41 403 0461
Contact Centre National - Int: 08610 COEGA 1 08610 26342
Contact Centre International - Tel: +27 (0) 41 403 4900 • Fax: +27 (0) 41 403 4938 • 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 Ngoasheng (Chair); M Silinga (CEO); Dr P Jourdan; J de Bruyn; S Nondwengu; M U Matshamba; S Zikode; P S Ndona
Company Secretary: M N Pango
Registration number: 82003891/07

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.

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		
Telephone:	()	Postal code:	4320
E-mail:	<i>emil@megatrade.co.za</i>	Cell:	082 465 9825
		Fax:	(086) 600 8622

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

Environmental Assessment Practitioner (EAP):	Paul Lochner		
Contact person:	Paul Lochner		
Postal address:	P.O. Box 320, Stellenbosch		
Telephone:	(021) 888 2486	Postal code:	7599
E-mail:	<i>plochner@csir.co.za</i>	Cell:	084 442 3646
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		
Telephone:	(041) 403 0400	Postal code:	6000
E-mail:	<i>centre@coega.co.za</i>	Cell:	
		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		
Telephone:	(041) 506 3111	Postal code:	600
E-mail:	<i>dmccarth@mandelametro.gov.za</i>	Cell:	082 827 7744
		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		

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.

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.

The directly associated infrastructure for the project includes:

- 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
Note: 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.

<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.
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(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: 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 _____

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- Fedure Building · 315 Pretorius Street · PRETORIA
Tel (+ 27 12) 310 3911 · Fax (+ 2712) 322 2682

Ref: 12/12/20/1680
Enquiries: Ms L Grobbelaar
Tel: 012 310-3087 Fax: 012 320-7539 E-mail: L.Grobbelaar@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 8279]