

BIRDLIFE SA

Rozanne Els
Savannah Environmental
Email: rozanne@savannahsa.com and publicprocess@savannahsa.com

11 January 201

Dear Rozanne

**Re: Application for Amendment to the Environmental Authorisation: Proposed Witberg Wind Energy Facility and Associated Infrastructure, Western Cape Province
(DEA Ref.: 12/12/20/1966/AM6)**

Thank you for the opportunity to comment on the above application. BirdLife South Africa supports the responsible development of renewable energy and would like to note the following concerns.

Procedural issues:

On the 11 December 2018 I received an email reminder that the comment period for the draft Motivation Report for the above project ended on Friday, 14 December 2018. However I had not received the any notices prior to this, other than an email in August asking for confirmation that BirdLife South Africa wanted to remain an interested and affected party (I&AP). My colleague, Dale Wright, also received the reminder, but not the first notification of the opportunity to comment. It is unclear if this problem extended to other I&APs. On 12 December I requested an extension, but received no response from Savannah. On returning from leave I followed up, inquiring what a reasonable deadline was for comment and still await a response to this question. **We trust that this input will be considered and encourage you to follow up with other I&APs to confirm if they received the initial notification.**

Changes in turbine specifications

There is limited scientific literature to shed light on the debate whether larger turbines will result in increased fatality rates and if this could be balanced by the increase power output (see for e.g. Marques et al. 2014). While we welcome the proposed reduction in the number of turbines, we remain concerned that the data collected is out of date and inadequate for the purposes of assessing and mitigating the impacts associated with increasing the turbine size (see below, plus our comments dated 29 July 2015).

Extension of the validity of the EA

BirdLife South Africa is of the opinion that there are very good reasons to limit the period that environmental authorisations are valid for. These include that:

- 1) The receiving environment, and thus the environmental impact (including cumulative impact) may change;
- 2) There could be advances in our understanding of the nature and significance of impacts, and how to assess and mitigate impacts;
- 3) There could be economic and technological advances, both with regards to the project infrastructure and mitigation options;
- 4) The need and desirability of the project, and availability of alternatives to meet the need, could change; and

- 5) Lessons could be learned from procedural and operational challenges faced at operational projects.

A project approved some years ago may not be the best practicable environmental option when considered with today's insights.

While BirdLife South Africa understands the challenges renewable energy developers face with regards to the timing of the Renewable Energy Independent Power Producer Procurement Programme, and we encourage the adoption of new, more efficient technologies, we do suggest that it is important to revisit impact assessment with the above points in mind and avoid perpetuating mistakes of the past.

- 1) *Has the receiving environment, and thus the environmental impact (including cumulative impact) changed?*

Although the amendment report by Birds and Bats Unlimited concludes that the baseline environment has not changed, we can find no evidence that they visited the site more recently than January 2015. We suggest that as a minimum a site visit, and nest site survey would have been appropriate. In particular we suggest that it would be important to determine if the Verreaux's Eagle territory where the nest was illegally destroyed prior to the 20-14/2015 survey (i.e. Elandsfontein) has been reoccupied and if nesting has resumed. Similarly, it would be useful to record any other changes in the use of and location of other nesting areas as this may affect flight patterns and thus the risk of collisions. In short, we do not know if the receiving environment has changed.

- 2) *Have there been advances in our understanding of the nature and significance of impacts, or how to assess and mitigate impacts?*

The potential significance of impacts on birds has changed from when the environmental authorisation was issued in 2011. At that time of the EIA, Verreaux's Eagle was not threatened; it is now listed as regionally Vulnerable. Martial Eagle has also been up-listed from Vulnerable to Endangered. At the time of the initial EIA, there were also no confirmed fatalities of Verreaux's Eagle or Martial Eagle at wind energy facilities. We now know that these species are at risk, including beyond the recommended nest buffers. We also know that the area has exceptionally high passage rates of Verreaux's Eagle.

There have also been significant improvements in the type and amount of data collected for avifaunal impact assessments in South Africa. The first avifaunal impact assessment study falls well short of what is currently considered to be international best practice.

These shortcomings have been addressed, to some extent, through the pre-construction monitoring programme and subsequent reports. However, project has been compromised incremental decision-making. Once the EA was issued (which was based on inadequate information) the focus of specialist assessments was how to minimise impacts, not whether or not the project should go ahead.

The additional avifaunal studies also fall short of what is recommended in BirdLife South Africa's 2017 Guidelines on Verreaux's Eagle and Wind Farms. This recommends that if wind turbines are proposed within areas likely to include Verreaux's Eagle territory, vantage points should be monitored for at least 72 hours per year, and if turbines are proposed within areas associated with high flight activity or risky behaviour (including topographic features and within 3 km of nests), monitoring should be extended for two years.

- 3) *Have there been economic and technological advances?*

This appears to be the only issue that has been considered in the application. We put forward that just as the applicant should be able to benefit from technological advances, the environment should also benefit from new information and better understanding of the issues.

4) *Has the need and desirability of the project changed?*

While there is undoubtedly a need for renewable energy in South Africa, we now know that much of South Africa has feasible wind resource. A substantial number of wind farms also have environmental authorisation in South Africa; enough for our energy targets to be met. The need and desirability of the project has almost certainly changed.

5) *Lessons from procedural and operational challenges at other wind energy facilities.*

We are of the opinion that it is a good idea to revisit the conditions of authorisation and EMPr's whenever amendments or extensions to the validity of authorisations are applied for, as this is an opportunity to address any shortcomings and implementation challenges identified at operational projects.

We note the following points for completeness sake, but this should not be construed as an endorsement of the application.

To reduce the risk of fatalities as a result of electrocution or collisions with powerline infrastructure we recommend the inclusion of a new condition of approval. This should require that all internal powerlines (i.e. between turbines) must be underground and follow the access roads, except where this is not a geotechnically feasible. The design of all above-ground powerlines must be confirmed to bird-friendly by the Endangered Wildlife Trust's Wildlife and Energy Programme, and should be marked with bird flight diverters.

We have encountered significant reluctance to implement operational phase mitigation (e.g. shutdown on demand, or painting a turbine blade) at operational wind farms in South Africa. Concerns expressed include the cost, impact on turbine manufacturer guarantees, and that there is limited evidence to demonstrate the effectiveness of this approach in similar circumstances. There has also been some debate around appropriate thresholds for action. To date, only one wind farm in South Africa has implemented any sort of shut-down-on-demand programme and none have expressed any willingness to paint turbine blades. We therefore recommend that the EMPr and EAs be far more explicit with regards to the EMPr objectives, targets, actions, and thresholds for additional mitigation.

The condition 40 of the authorization (as amended) is therefore of concern (i.e. "should any unanticipated negative impacts be recorded, Witberg Wind (Pty) Ltd commits to reducing these impacts. Mitigation measures to achieve this include shutting down problem turbines, if this is deemed necessary"). This condition is open-ended and ambiguous. Reference to "unanticipated" impacts is problematic as bird fatalities, including of threatened species, are anticipated at this proposed wind farm - it is the number of fatalities that is uncertain. It is also not clear who is responsible for deciding when and what mitigation is "necessary" and what criteria should be used.

The EMPr and amendment application does make some proposals for thresholds for additional mitigation, but are we very concerned that this could be interpreted sanctioning unsustainable fatality rates. The threshold put forward in the EMPr is that all *turbines* killing one or more Red Data Book bird per year must be painted or fitted with an automated deterrent or curtailment device (operational

phase objective 11). In other words, if fatalities are spread equally across the wind farm, 25 Red Data Book birds could be killed at the wind farm, with no mitigation action recommended by the EMPr!

The amendment report by Birds and Bats Unlimited suggests a very different threshold – i.e. one Verreaux’s Eagle fatality per year for the whole wind farm - but it does suggest that turbines with high fatality rates (e.g. Red Data Book bird per turbine per year) should be the focus of mitigation efforts.

Given that *multiple threatened birds have been predicted to be killed at the facility over its lifetime*, we also question the “wait and see” approach to implementing operational phase mitigation. We suggest that the proactive implementation of automated shutdown on demand would help minimise fatalities from the outset.

In general, the EMPr is poorly written, with little apparent attention to detail. For example:

- The stated objective (11) of the operational phase EMPr is “ Loss of habitat-disturbance or destruction and monitor potential injury to avifauna and fatalities” – the objective should surely be to *minimize* the loss of habitat etc.?
- It fails to recognize that shortcomings of the impact assessment and mitigation strategy could be responsible for high fatality rates, citing the major risk being a result of changes in flight patterns (11.3, operational phase).
- There is unnecessary repetition (e.g. 21.6 and 21.8 of construction phase EMPr could be merged).
- It includes outdated reference to preconstruction monitoring (e.g. 21.7, construction phase).
- Is inconsistent with some of the recommendations of the specialist (e.g. Dr Simmons recommends construction phase monitoring of birds, this is recommended in the EMPr).
- It is inconsistent with the recommendations of BirdLife South Africa and EWT’s Best Practice Guidelines (e.g. with regards to the recommended duration of post-construction monitoring (11, operational phase).
- It does not provide details on the roles and responsibilities for drafting and implementing the Adaptive Management Plan, or I&AP consultation related to this.
- It does not address the protection and monitoring of Verreaux’s Eagle nest sites, has been recommended by Dr. Simmons.

Conclusion

BirdLife South Africa does not support the application to extend the validity of the environmental authorisation. While we respect the applicant’s wish to benefit from the increased efficiency of new, larger turbines, we suggest that that the entire project should be considered in light of the most recent information and insights, not just one aspect of it. We caution against continuing with incremental decision-making.

Based on the available information we are of the opinion that there are more suitable areas for the development of wind energy in South Africa, and that the proposed Witberg Wind Farm poses an unnecessary risk to biodiversity. There is no certainty that mitigation will be effective, and we do not believe that the EMPr is adequate to ensure that the predicted impacts on threatened species will be mitigated.



Giving Conservation Wings

BirdLife South Africa is a partner of BirdLife International, a global partnership of nature conservation organisations.
Member of IUCN (International Union for Conservation of Nature).

Reg No: 001 – 298 NPO
PBO Exemption No: 930004518

Yours sincerely

A handwritten signature in black ink, appearing to read "Samantha", written in a cursive style.

Samantha Ralston-Paton
Birds and Renewable Energy Project Manager

CAPE NATURE

SCIENTIFIC SERVICES

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reference 14/2/6/1/5/2_LAIN/WITBERG_WEF_2018/CF057
date 13th December 2018

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P.O. Box 148

Sunninyhill Tel.: (011) 656 3237
Johannesburg Fax: 086 684 0547
2157

publicprocess@savannahsa.com

Attention: Ms Rozanne Els

CONSULTATION IN TERMS OF SECTION 24(O) AND (3), IN TERMS OF THE NEMA ENVIRONMENTAL IMPACT ASSESSMENT REGULATIONS (AS AMENDED), FOR THE ENVIRONMENTAL AUTHORISATION AMENDMENT APPLICATION FOR THE PROPOSED WITBERG WIND ENERGY FACILITY AND ASSOCIATED INFRASTRUCTURE, LAINGBURG, LAINGSBURG LOCAL MUNICIPALITY.

DEA EA Reference Number: 12/12/20/1966/AM6

CapeNature would like to thank you for the opportunity to comment on the application and would like to make the following comments. Please note that our comments only pertain to the biodiversity related impacts and not to the overall desirability of the application.

The WEF received Environmental Authorisation in 2011 and the amount of turbines approved was reduced from 70 down to 27. CapeNature has records of comment provided in this process. The following information was abstracted from the documentation supplied by the consultant detailing the proposed amendment details:

In this regard, Witberg Wind Farm (Pty) Ltd are considering an updated turbine model for the project. An amendment to the authorised turbine specifications are required as follows:

- » Range of Hub height: from 92m to a **range from 92m to up to 120m;**
- » Range of Rotor diameter: from 116m to a **range from 116m to up to 136m;** and
- » Range of Wind turbine capacity per wind turbine: from 3MW to a **range from 3MW to up to 5MW.**

In addition, an amendment to the wind farm layout is required to avoid sensitive areas, and to optimise the layout. Therefore, the number of wind turbines will be reduced from 27 wind turbines to **25 wind turbines**, and the wind turbines and associated infrastructure will be re-positioned within the originally assessed site.

The topographical setting for the site is hilly and according to Mucina and Rutherford¹ and the Western Cape Biodiversity Spatial Plan (WCBSP 2017)², all vegetation units impacted are still listed as **Least Threatened** (Figure 1). There are also numerous non-perennial streams present on the properties over which infrastructure will need to be placed.

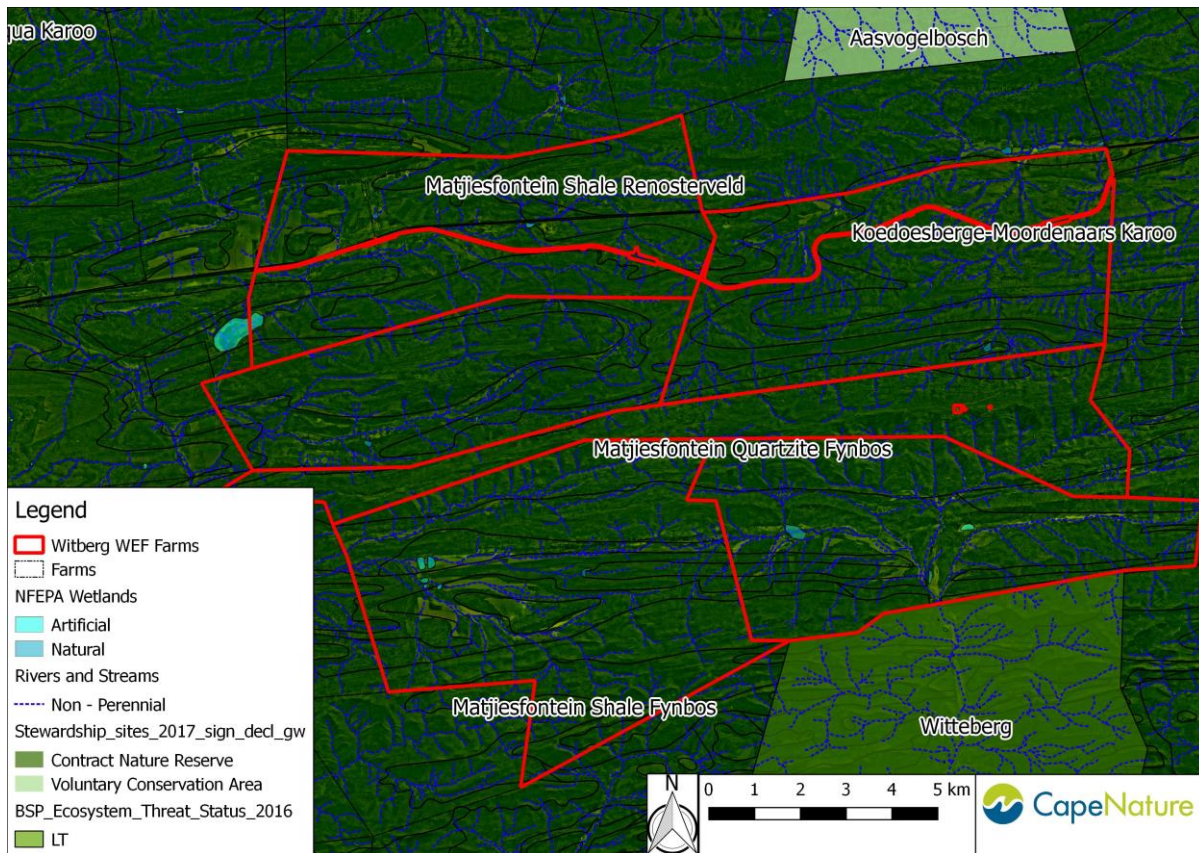


Figure 1: Map of Witberg WEF properties relevant to vegetation units and locations of known streams and rivers.

As can be seen in Figure 3, there are numerous WCBSP (2017) layers present on the properties. In addition to which, almost the entire region on the property, is listed as Critical Biodiversity Area 1 (CBA), Ecological Support Area 2, ESA 2 and Other Natural Area. Various reasons are supplied within the WCBSP (2017) data for these classifications.

¹ Mucina, L. & Rutherford, M. C. (EDS) 2006. The Vegetation of South Africa, Lesotho and Swaziland. Strelitzia 19. South African National Biodiversity Institute, Pretoria. (revised 2012)

² Pence, G.Q.K. 2017. The Western Cape Biodiversity Spatial Plan: Technical Report. In Prep. Western Cape Nature Conservation Board (CapeNature), Cape Town.

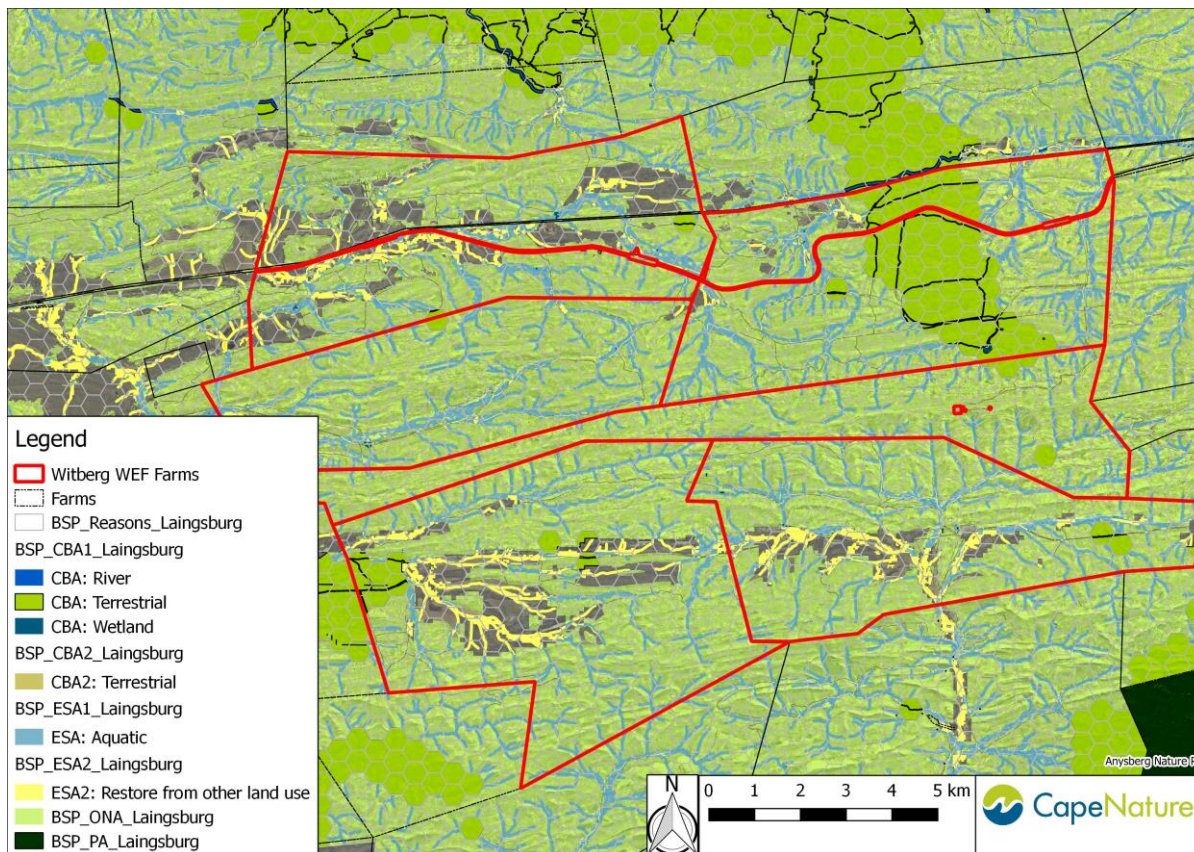


Figure 2: Map of Witberg WEF properties WCBSP data (2017).

Following a review of the EA motivation report and appendices, CapeNature would like to make the following comments/recommendations.

1. The cumulative impact needs to be assessed relative to all approved WEFs in the region and all specialists need to take this into consideration.
2. All maps still seem to illustrate the extent of 27 turbines and it is unclear where the new locations of the 25 turbines will be situated?
3. The noise impact on fauna was not considered, has this changed considerably?
4. The ecological specialist report and all other relevant reports, need to be updated to include consideration of the WCBSP (2017) data, in terms of impact assessment and sensitivity ratings, not Skowno *et al.* (2009)³. In addition to which the following aspects WCBSP (2017) data need to be considered:

4.1. CBA regions are areas delineated that are in a natural condition that are required to meet biodiversity targets, for species, ecosystems or ecological processes and infrastructure. As stipulated in the Land Use Advice (LUA) Handbook (Pool-Stanvliet *et al.* 2017)⁴ although the Farms may have undergone a level of disturbance, this cannot be used as motivation for establishing of development within CBA or ESA areas. It should be noted that it is the landowner's responsibility to ensure his

³ Skowno, A.L., Holness, S.D. & Desmet, P. (2009). *Biodiversity Assessment of the Central Karoo District Municipality*. Unpublished Report, Department of Environmental Affairs and Development Planning, Cape Town.

⁴ Pool-Stanvliet, R., Duffell-Canham, A., Pence, G. & Smart, R. (2017). *The Western Cape Biodiversity Spatial Plan Handbook*. Stellenbosch: CapeNature.

property is suitably maintained at a level consistent with LUA guidelines. The loss of the CBA on the site will therefore compromise conservation targets and the loss of ESA would compromise the CBA. Could the EAP discuss this development in context with the CapeNature LUA guideline document? Reference to this document was not found within any of the reports.

- 4.2. Should the EAP wish to determine why particular WCBSP layers are present in a region the reasons layer of the dataset should be interrogated accordingly.
- 4.3. There is no mention of the stewardship sites located to the north and south of the WEF properties and how these may influence impact assessment ratings, from a biodiversity perspective.
5. CapeNature has previously received disturbing reports on a number of controversies attached to this WEF development, including the removal of an Eagle nest and harassing birds to get them to move out of the area. The previous Avifaunal specialist reports (while thorough), did not make provision for how the newly fledged chicks of the Verreaux's Eagle would use the landscape. This study was commissioned in order to provide this information and CapeNature has the following comments and recommendations.
 - 5.1. CapeNature remains concerned that this is the third specialist employed on this site, was the current specialist supplied all of the data collated by previous specialists? If so, it is unclear why this was stipulated to be only a one year study, when only one of the five eagle nests were active? This severely constrains the results and conclusions due to limitation associated with such a small sample set. CapeNature however, strongly maintains all mitigations as supplied by the specialist must be implemented as and when required. These include (but are not limited to):
 - 5.1.1. Bird flight diverters be fitted to all overhead power lines and where possible lines should be buried especially on-site
 - 5.1.2. Post-construction monitoring is imperative. If eagle fatalities exceed 0.72 per year for the site mitigation measures must be implemented. Turbines killing one or more threatened species per year must be mitigated which may include one or more of the following:
 - One blade painted a different (colour subject to Civil Aviation regulations)
 - Fitting turbines with automated deterrents
 - Shut-down-on-demand of specific turbines
 - 5.1.3. Post-construction monitoring to be done over a period of a minimum of 24 months, which can be extended based on the outcomes of the monitoring.
 - 5.1.4. No turbines to be constructed within at least 1.5 km from known Verreaux's Eagle Nests. CapeNature noted in previous letters that there were 5 different nests, yet in this assessment there was only one, which is a direct concern.
 - 5.1.5. Considering the issues around the removal of the nests, a written agreement with the landowner regarding the protection of the nest and allowing monitors onto the property to monitor nests must be reached as a condition in the authorisation.
 - 5.1.6. No construction work within 1000m of the nests of any Booted and Verreaux's Eagles during the breeding season of these two species.

5.2. Lastly on page 25 of the avifaunal report by Birds & Bats Unlimited the authors refer to a monitoring program that the Witberg Wind Power (Pty) Ltd will develop as one of the conditions specified by the Department of Environmental Affairs. From the paragraph it is deduced that this has already be compiled and CapeNature would like to request a copy if possible?

Given the above there is **insufficient information** for CapeNature to formulate an informed opinion on the proposed EA amendment application. CapeNature reserves the right to revise initial comments and request further information based on any additional information that may be received.

Yours sincerely



Colin Fordham
For: Manager (Scientific Services)

SCIENTIFIC SERVICES

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reference SSD 14/2/6/1/1/1_Procedures
date 9 April 2018

To Whom It May Concern:

CAPENATURE'S REQUIREMENTS FOR PROVIDING COMMENTS ON AGRICULTURAL, ENVIRONMENTAL, MINING, PLANNING AND WATER-USE RELATED APPLICATIONS

CapeNature is the statutory custodian of biodiversity in the Western Cape¹ and commenting authority concerning potential impacts on biodiversity. This letter and Annexure A outline requirements for submission of applications to CapeNature for the consideration, investigation and reporting on the biodiversity aspects of proposed changes to land use that may require an official decision.

In order to ensure that biodiversity and ecological issues are addressed as early as possible in the application process and as comprehensively as required, please take note of the following information. This is applicable to any application that requires comment from CapeNature and complying with these recommendations should assist in avoiding delays in the process.

Minimising negative impacts on biodiversity

As part of the commenting process, CapeNature's involvement will relate specifically to the impact of the proposed development activities on the biodiversity and ecological aspects of the receiving environment. CapeNature expects that a precautionary and risk-averse approach be adopted towards those projects which may result in substantial detrimental impacts on biodiversity and ecosystems, especially the irreversible loss of habitat and ecological functioning in threatened ecosystems [as identified by the National Biodiversity Assessment, 2011² or the WCBSP Ecosystem Threat Status (2017)³ data] or designated sensitive areas: i.e. Critical Biodiversity Areas as identified by the Western Cape Biodiversity Spatial Plan (WCBSP 2017)³ [systematic conservation plans, Biodiversity Sector Plans or Bioregional Plans] and Freshwater Ecosystem Priority Areas [as identified by National Freshwater Ecosystem Priority Area (NFEPA)⁴].

All reports must demonstrate how the proponent intends complying with the principles contained in section 2 of the National Environmental Management Act, 1998 (Act No. 107 of 1998), as amended (NEMA), which, amongst other things, indicates that environmental management should:

- In order of priority aim to: avoid, minimise or remedy disturbance of ecosystems and loss of biodiversity;
- Avoid degradation of the environment;
- Avoid jeopardising ecosystem integrity;

¹ Section 9, Western Cape Nature Conservation Board Act 15 of 1998

² Driver, A., Sink, K.J., Nel, J.L., Holness, S., Van Niekerk, L., Daniels, F., Jonas, Z., Majiedt, P.A., Harris, L. & Maze, K. (2012). *National Biodiversity Assessment 2011: An assessment of South Africa's biodiversity and ecosystems*. South African National Biodiversity Institute and Department of Environmental Affairs, Pretoria.

³ Pool-Stanvliet, R., Duffell-Canham, A., Pence, G. & Smart, R. (2017). *The Western Cape Biodiversity Spatial Plan Handbook*. Stellenbosch: CapeNature.

⁴ Nel, J.L., Murray, K.M., Maherry, A.M., Petersen, C.P., Roux, D.J., Driver, A., Hill, L., Van Deventer, H., Funke, N., Swartz, E.R., Smith-Adao, L.B., Mbona, N., Downsborough, L. & Nienaber, S. (2011). *Technical Report for the National Freshwater Ecosystem Priority Areas project*. WRC Report No. K5/1801.

- Pursue the best practicable environmental option by means of integrated environmental management;
- Protect the environment as the people's common heritage;
- Control and minimise environmental damage; and
- Pay specific attention to management and planning procedures pertaining to sensitive, vulnerable, highly dynamic or stressed ecosystems.

These principles must underpin decision-making concerning matters that may affect the environment. As such, it is incumbent upon the proponent to show how proposed activities would comply with these principles and thereby contribute towards the achievement of sustainable development as defined by the NEMA.

Status of CapeNature's comment

Please note that CapeNature does not consider verbal discussions regarding any aspect of a proposed development as adequate or complete comment. Please ensure that you obtain written comment once all the necessary information is made available for review. We reserve the right to amend our position based on any new information that may be received.

Applications requiring comment from CapeNature should be sent to the following addresses:

City of Cape Town & Stellenbosch Municipalities:

CapeNature
 Scientific Services: Land Use Advice
 P/Bag X5014
 STELLENBOSCH
 7599
 Attention: Rhett Smart

Email: rsmart@capenature.co.za
 Tel: 021 866 8000
 Fax: 021 866 1523 / 086 529 4992

Cape Agulhas, Overstrand, Swellendam & Theewaterskloof Municipalities:

CapeNature
 Scientific Services: Land Use Advice
 P/Bag X5014
 STELLENBOSCH
 7599
 Attention: Chanel Rampartab

Email: crampartab@capenature.co.za
 Tel: 021 866 8000
 Fax: 021 866 1523 / 086 529 4992

Berg River, Cederberg, Matzikamma, Saldanha and Swartland Municipalities:

CapeNature
 Scientific Services: Land Use Advice
 P/Bag X5014
 STELLENBOSCH
 7599
 Attention: Alana Duffell-Canham

Email: aduffell-canham@capenature.co.za
 Tel: 021 866 8000
 Fax: 021 866 1523 / 086 529 3475

Breede Valley, Drakenstein, Langeberg and Witzenberg Municipalities:

CapeNature
Scientific Services: Land Use Advice
P/Bag X5014
STELLENBOSCH
7599
Attention: Philippa Huntly

Email: phuntly@capenature.co.za
Tel: 021 866 8000
Fax: 021 866 1523 / 086 529 3475

Beaufort West, Bitou, Knysna, Hessequa, George, Kannaland, Laingsburg, Oudtshoorn, Mossel Bay and Prince Albert Municipalities:

CapeNature
Scientific Services: Land Use Advice
P/Bag X6546
GEORGE
6530
Attention: Colin Fordham

Email: cfordham@capenature.co.za
Tel: 044 802 5329
Fax: 086 554 4165

Forward Planning Documents, Environmental Management Frameworks, policies, guidelines and legislation for all regions in the Western Cape

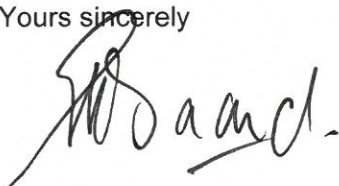
CapeNature
Scientific Services: Land Use Advice
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Fax: 021 866 1523 / 086 529 3475

A map illustrating the officials responsible for each municipality is provided (Figure 1).

Thank you in advance for your co-operation in this regard.

Yours sincerely



Dr Ernst Baard
Executive Director: Biodiversity Support

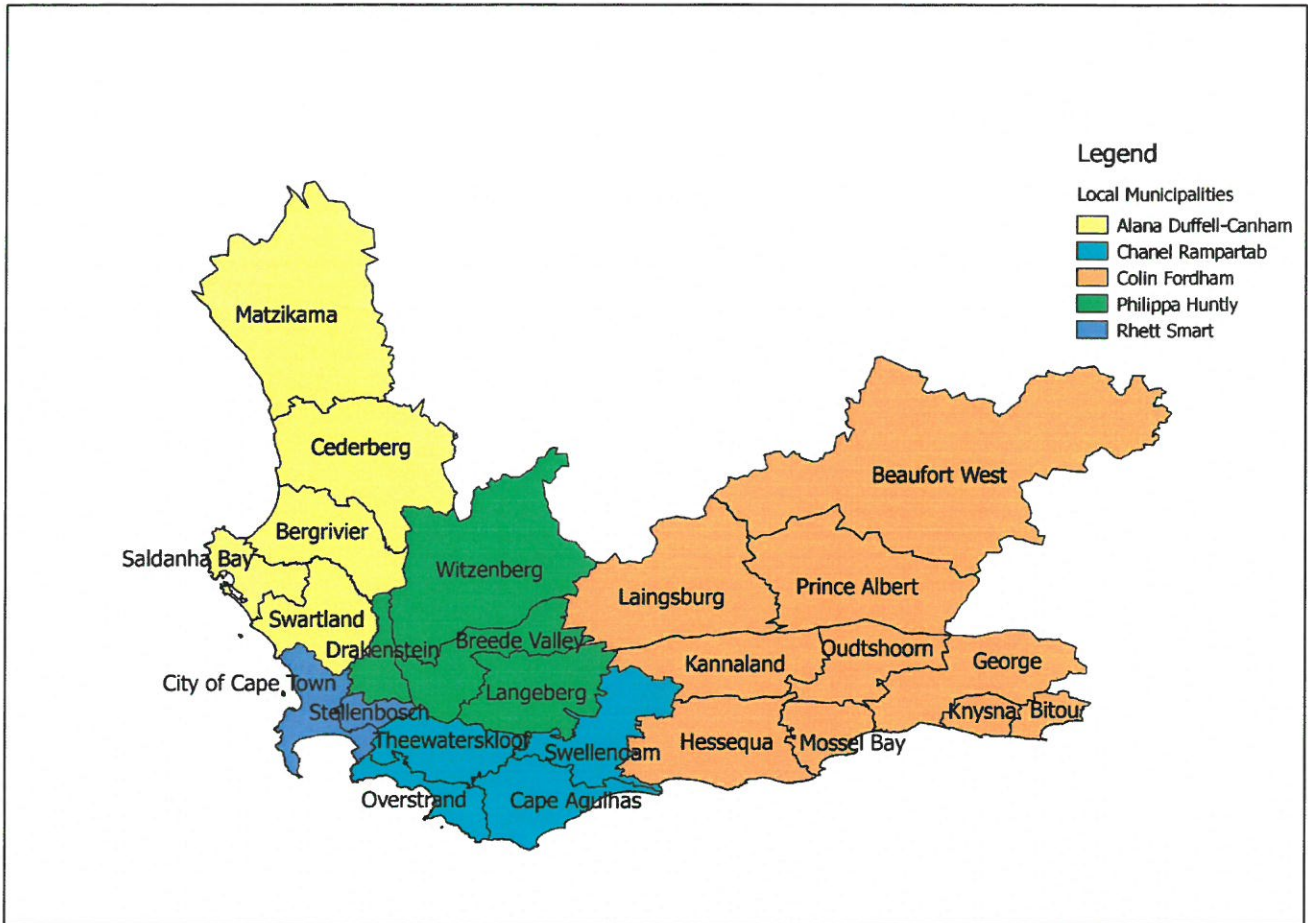


Figure 1. Map illustrating the officials responsible for each local municipality.

Annexure A: CapeNature's Requirements Regarding Development Applications

To assist all relevant stakeholders, the following aspects regarding development applications within the Western Cape are requested to be adhered to. The aim of this annexure is to minimise delays and ensure adequate consideration is given to the biodiversity and ecological infrastructure of the Western Cape.

Guidelines and biodiversity plans

1. The Western Cape Department of Environmental Affairs and Development Planning (DEA&DP) has produced a series of guideline documents that provide clear guidance on the EIA process¹. Specifically, they aim to improve the capacity of environmental assessment practitioners (EAPs) to draft appropriate terms of reference that meet the information requirements for informed environmental decision-making. In addition, the Fynbos Forum Ecosystems Guidelines for Environmental Assessment in the Western Cape (see point 1b below) provides appropriate terms of reference for Botanical Assessments. All stakeholders should also make use of the CapeNature Western Cape Biodiversity Spatial Plan (WCBSP) Land Use Advice (LUA) Handbook (see point 1c below). With a view to adequately assessing impacts on biodiversity, we request that your environmental assessment is informed by the following documents. The implementation of relevant recommendations and/or actions as stipulated in these documents should be critically considered, regardless of whether a Basic Assessment, Scoping & EIA or any other authorisation process is to be undertaken. By consulting these documents and meeting the requirements for submission of accurate and relevant information, EAP's, specialists and stakeholders can support efficient and accountable decision-making.
 - a. Brownlie S (2005) *Guideline for involving biodiversity specialists in EIA processes: Edition 1*. CSIR Report No ENV-S-C 2005 053 C. Republic of South Africa, Provincial Government Western Cape, Department of Environmental Affairs and Development Planning, Cape Town⁴.
 - b. De Villiers C.C., Driver A., Clark B., Euston-Brown D.I.W., Day E.G., Job N., Helme N.A., Holmes P.M., Brownlie S. and A.B. Rebelo (2016). *Ecosystem Guidelines for Environmental Assessment in the Western Cape*, Edition 2. Fynbos Forum, Cape Town.²
 - c. Pool-Stanvliet, R., Duffell-Canham, A., Pence, G. & Smart, R. (2017). *The Western Cape Biodiversity Spatial Plan Handbook*. Stellenbosch: CapeNature.
 - d. The latest National Biodiversity Assessment (2011)³ provides information about ecosystem threat status. More up-to-date ecosystem threat status information, however is available from CapeNature in the form of the WCBSP Ecosystem Threat Status (2016) data, accessible on SANBI's Biodiversity GIS website⁴.
 - e. The latest provincial biodiversity framework (conservation plan), which reflects identified Critical Biodiversity Areas; currently is the WCBSP 2017, available on SANBI's Biodiversity GIS website⁹. The most recent conservation plans and their associated reports and guidelines are available at the SANBI Biodiversity GIS Unit website⁵. The mapping tools are useful, but please note that while these tools can help to identify potential issues, the use thereof does not constitute a biodiversity assessment.
 - f. The Western Cape Provincial Spatial Development Framework (2014) (Department of Environmental Affairs & Development Planning)⁶.
 - g. The Department of Water and Sanitation's Draft Guideline (2014): Assessment of activities/developments affecting wetlands⁷.

¹ <http://eadp.westerncape.gov.za/our-services-to-you/submitting-a-development-application-in-terms-of-relevant-legislation>

² http://biodiversityadvisor.sanbi.org/wp-content/uploads/2012/04/Ecosystem_Guidelines_Ed2.pdf

³ <http://bgis.sanbi.org/nba/project.asp>

⁴ <http://bgis.sanbi.org/Projects/Detail/194>

⁵ <http://bgis.sanbi.org> or email BGISHelp@sanbi.org

⁶ <http://www.westerncape.gov.za/eadp/your-resource-library/western-cape-provincial-spatial-development-framework>

⁷ DWS. (2014a). *Draft DWS Guideline: Assessment of Activities/ Developments Affecting Wetlands*. Department of Water and Sanitation, Pretoria.

Biodiversity 'red flags' in the Western Cape

2. The following factors must be taken into account during project planning and assessment:

- a. CapeNature *does not support* activities that may negatively impact on the following habitats and their ecological functioning:
 - i. Rivers, wetlands, flood plains, estuaries, tidal flats or salt marshes and groundwater-dependent communities or ecosystems.
 - ii. Representative habitat in Critically Endangered and Endangered ecosystems.
 - iii. Any area that has been identified as a Critical Biodiversity Area or Ecological Support Areas as identified by the most recent systematic conservation plan.
 - iv. Any other special habitats that may contain a unique assemblage of species. This could include *inter alia*, dolomite outcrops, quartz or ferricrete patches.
 - v. Any habitat that may contain rare, threatened or range-restricted floral or faunal species (Species of Conservation Concern).
 - vi. Natural or mostly natural habitat in an ecological corridor or along a vegetation boundary (including frontal dune systems).

Appropriate buffers must be determined by a suitably qualified specialist to avoid impacting on these habitats and particular attention should be paid to avoiding the loss of intact habitat, maximizing connectivity at a landscape scale, maximizing habitat heterogeneity and reducing fragmentation at a local and regional scale. Please also note that an infestation by alien plants does not necessarily mean that an area is not important for biodiversity conservation.

- b. The Cape Floristic Region is largely a fire-dependent system and natural fire regimes must be maintained and managed in the landscape. The exclusion of fire from certain habitats will be considered unacceptable as this may ultimately cause the loss of species. Where appropriate, the location of fire-breaks should be indicated and these fire-breaks may be considered part of the development footprint. Fire-breaks must be brush-cut and vegetation must not be completely removed. Brush-cutting under power lines must occur as infrequently as possible as brush-cutting will lead to loss of species diversity over time. A fire-risk assessment can help inform an appropriate layout for developments adjacent to fire-prone vegetation.
- c. CapeNature has concerns regarding land uses or activities within declared Mountain Catchment Areas (MCA), especially activities which may affect the quality or volume of water downstream of any of these regions. These activities could *inter alia* include buildings, hard infrastructure, canalization, cut-off drains and cultivation within these regions. WCBSP categories are not mapped within formally protected areas such as MCAs, as it is assumed that the objectives of the MCA Act apply. The MCA objectives are that these areas will be managed in a manner consistent with the prevention of soil erosion, the protection of natural vegetation, and the management of invasive alien plants (a.k.a., 'intruding vegetation'). In addition to which, the purposes of NEM: PAA (to be read, interpreted and applied in conjunction with the NEM: BA), need to be upheld. These NEM: PAA purposes are: "*To provide for the protection and conservation of ecologically viable areas representative of South Africa's biological diversity and its natural landscapes and seascapes; ...[and] for the management of those areas...*". In relation to a protected area, management includes control, protection, conservation, maintenance and rehabilitation of the protected area, with due regard to the use and extraction of biological resources, community-based practices and benefit-sharing activities in the area in a manner consistent with the NEM: BA.
- d. Water is a limited resource in the Western Cape. Water requirements for proposed activities and the potential impact on broader surface and ground water resources must be rigorously assessed and considered by an aquatic/freshwater specialist and/or ground water specialist, including the cumulative impact if other developments are also taking place in an area. Cumulative impacts on infrastructure such as Waste Water Treatment Works must also be considered. It is also recommended that where possible all developments should consider recycling grey water for suitable usage.

Groundwater use for bulk supply purposes and irrigation must be assessed rigorously with specific reference to the possible groundwater-surface water interfaces. Groundwater use assessments must include the identification of possible groundwater dependent ecosystems and/or possible interfaces with surface resources and not only potential anthropogenic uses. Aquifers need to be described in terms of: aquifer type, aquifer characteristics, aquifer condition, as well as aquifer recharge and yield⁸.

- e. Rehabilitation of any disturbed ecosystems is only considered successful when the ecosystem has returned to an ecologically functional state and has a similar species assemblage as its natural state. Such applications must have a complete rehabilitation plan appended to submitted documentation. It should also be noted that CapeNature will not support new mining applications on property where previously mined areas have not been suitably rehabilitated to a suitable ecologically functional state and have been officially closed by the DMR. Mining is not permitted within a NEM: PAA registered protected area and CapeNature will not support any development proposal or amendment which contravenes this.
- f. Activities which may cause fragmentation of CBAs leading to loss of ecological connectivity are not supported by CapeNature. Activities which may cause this include inter alia subdivision and linear activities such as roads, railways, pipelines and power lines.

Specialist assessment(s) should be undertaken if any of the above-mentioned circumstances prevail or if there is any doubt about the biodiversity value of the potentially impacted areas. The opportunities and constraints of the receiving environment should be used to inform the desirability and layout of any development proposal so as to ensure that developments do not compromise the biodiversity value of the area.

Commissioning of biodiversity specialists

- 3. A suitably qualified and experienced specialist is critical to ensuring that the necessary information is provided for informed decision-making. Please take note of the following recommendations⁹:

Biodiversity specialists should:

- a. Be competent at interpreting and evaluating information and able to explain the direct and indirect consequences of an activity to biodiversity;
- b. Have appropriate formal training in his/her field of expertise;
- c. Have sufficient practical experience working in the specific ecosystems of the affected region;
- d. Be able to trace impact pathways and identify indirect or cumulative impacts and consider ecosystem goods and services;
- e. Have good knowledge relating to assessment techniques and to relevant legislation, policies and guidelines;
- f. Be independent; and
- g. Be registered with the South African Council for Natural Scientific Professions (SACNASP).

CapeNature also requests that specialists be asked to review the information in the report to be submitted for decision-making to confirm that their opinion has been adequately reflected.

Permit requirements

- 4. Please note that according to Section 63(1) of the Western Cape Nature Conservation Laws Amendment Act No. 3 of 2000:

No person shall—

- (a) uproot the plant in the process of picking the flower of any flora;

⁸ For groundwater-related assessments, consult: Saayman, I (2005) *Guideline for involving hydrogeologists in EIA processes: Edition 1. CSIR Report No ENV-S-C 2005 053 D*. Republic of South Africa, Provincial Government of the Western Cape, Department of Environmental Affairs & Development Planning, Cape Town.

⁹ For more information/details please refer to the Guideline for involving biodiversity specialists in EIA processes (DEA&DP 2005).

- (b) without a permit—
 - i. pick any endangered or protected flora, or
 - ii. pick any flora on a public road or on the land on either side of such road within a distance of ninety metres from the centre of such road, or
- (c) pick any protected or indigenous unprotected flora on land of which he or she is not the owner, without the permission of the owner of such land or of any person authorised by such owner to grant such permission

If these activities will be involved in the application (for example search and rescue) make sure that you also apply for a CapeNature permit to carry out these activities. To obtain such permits please contact the relevant Conservation Services Officials at the nearest CapeNature Regional Office or use the following website address <http://www.capenature.co.za/permits-information/>.

Format of reports

- 5. Please help us provide you with a timely response by supplying all information in a readily accessible format:
 - a. We require all reports must be submitted (in colour), as digital copies on cd/dvd for review purposes. A printed cover letter, executive summary and pertinent A3 colour layouts (including relevant biodiversity overlay maps) must accompany the disc submission.
 - b. The reports submitted for review should include the main report, locality maps, all alternative layout plans and all biodiversity related specialist reports. Please save all files/reports on the cd/dvd as separate files and not one combined file.
 - c. We are not able to accept reports sent via email or ftp or website links due to auditing requirements and capacity constraints. An exception may be made only for spatial planning reports or Environmental Management Frameworks.
 - d. To facilitate assessment of potential impacts, we request that maps of proposed development layouts be overlaid with identified environmental features of a site. If provided separately, maps should be produced at the same scale.
 - e. Please provide GIS shape-files of the proposed development footprint, particularly for linear features or for combined applications with numerous sites,
 - f. Please allow sufficient time for post or courier services to deliver the documents and disc at the beginning of the commenting period. We receive a large number of reports and need to treat applicants and consultants fairly therefore applications will be processed from date of receipt within the required number of days as stipulated by the DEA&DP, the DMR or other competent authority.

Mining and Prospecting Applications

- 6. Please note that the DMR no longer sends copies of applications to commenting authorities. It is now the responsibility of the consultant working for the applicant to ensure that all commenting authorities receive the relevant documents. Therefore, point 5 above applies to mining and prospecting applications as well. EAPs must also provide copies of the EA once received.

DEPARTMENT OF ENVIRONMENTAL AFFAIRS



environmental affairs

Department:
Environmental Affairs
REPUBLIC OF SOUTH AFRICA

Private Bag X 447 · PRETORIA · 0001 · Environment House · 473 Steve Biko Road · Arcadia · PRETORIA

DEA Reference: 12/12/20/1966/AM7

Enquiries: Mmamohale Kabasa

Telephone: (012) 399 9420 **E-mail:** MKabasa@henvironment.gov.za

Ms Jo-Anne Thomas
Savannah Environmental (Pty) Ltd
PO Box 148
SUNNINGHILL
2191

Telephone Number: (011) 656 3237
Email Address: joanne@savannahsa.com

PER E-MAIL / MAIL

Dear Ms Thomas

COMMENTS ON THE DRAFT REPORT FOR THE APPLICATION FOR AMENDMENT OF THE ENVIRONMENTAL AUTHORISATION ISSUED ON 13 OCTOBER 2011 (AS AMENDED) FOR THE CONSTRUCTION AND OPERATION OF THE WITBERG WIND FARM WITHIN THE LAINGSBURG LOCAL MUNICIPALITY IN THE WESTERN CAPE PROVINCE

The Environmental Authorisation (EA) for the above-mentioned project dated 13 October 2011, the subsequent amendments approved on 29 November 2012, 13 August 2013, 26 November 2013, 28 November 2015 and 06 December 2017, the application for amendment of the EA received by the Department on 14 November 2018 and the draft EIAr received by the Department on 05 July 2018, refer.

The Department has the following comments on the abovementioned amendment application:

(a) Amendments applied for:

- (i) Amendment 6, as applied for requests the department to amend the wind monitoring mast from 80m to 120m. It must be noted that the EA does not include the wind monitoring mast. As such, the EAP is to provide the details in the EIAr where the mast was specified, provide confirmation if the mast was constructed or not, the date it was constructed and provide the authorisation for said wind monitoring masts.
- (ii) The EAP is requested to consolidate all the conditions from the previous amendments and appeal decisions that needs to be added into the EA.
- (iii) The EAP is required to submit a revised, signed application form that does not include the proposed amendment number 6.

(b) Public participation

- (i) Please ensure that comments from all relevant stakeholders are submitted to the Department with the final report. This includes but is not limited to the Western Cape Department of Environmental Affairs and Development Planning, the Department of Forestry and Fisheries (DAFF), the Western Cape Department of Agriculture, the South African Civil Aviation Authority (SACAA), the Department of Transport, the Laingsburg Local Municipality, the Department of Water and Sanitation (DWS), the South African National Roads Agency Limited (SANRAL), the South African Heritage Resources Agency

(SAHRA), the Endangered Wildlife Trust (EWT), BirdLife SA, the Department of Mineral Resources, the Department of Rural Development and Land Reform, and the Department of Environmental Affairs: Directorate Biodiversity and Conservation.

- (ii) Please ensure that all issues raised and comments received during the circulation of the draft report from registered I&APs and organs of state which have jurisdiction in respect of the proposed activity are adequately addressed in the final report. Proof of correspondence with the various stakeholders must be included in the final report. Should you be unable to obtain comments, proof should be submitted to the Department of the attempts that were made to obtain comments. The Public Participation Process must be conducted in terms of Regulation 39, 40, 41, 42, 43 & 44 of the EIA Regulations 2014 as amended.
- (iii) A Comments and Response trail report (C&R) must be submitted with the final report. The C&R report must incorporate all comments for this development. The C&R report must be a separate document from the main report and the format must be in the table format as indicated in Annexure 1 of this comments letter. Please refrain from summarising comments made by I&APs. All comments from I&APs must be copied verbatim and responded to clearly. Please note that a response such as "noted" is not regarded as an adequate response to I&AP's comments.
- (iv) The final report must also indicate that this draft report has been subjected to a public participation process.

(c) Layout & Sensitivity Maps

- (i) All preferred turbine positions must be clearly numbered. The turbine position numbers must be consistently used in all maps to be included in the final report.
- (ii) The final report must provide the technical details for the proposed facility in a table format as well as their description and/or dimensions. A sample for the minimum information required is listed under point 2 of the EIA information required for wind energy facilities below.
- (iii) A copy of the final layout map must be submitted with the final report. All available biodiversity information must be used in the finalisation of the layout map. Existing infrastructure must be used as far as possible e.g. roads. The layout map must indicate the following:
 - The envisioned area for the wind energy facility; i.e. placing of wind turbines and all associated infrastructure should be mapped at an appropriate scale.
 - All supporting onsite infrastructure such as laydown area, guard house, control room, and buildings, including accommodation etc.
 - All necessary details regarding all possible locations and sizes of the proposed satellite substation, the main substation and internal powerlines;
 - All existing infrastructure on the site, especially internal roads infrastructure;
 - The location of sensitive environmental features on site e.g. CBAs, heritage sites, wetlands, drainage lines etc. that will be affected by the facility and its associated infrastructure;
 - Buffer areas; and
 - All "no-go" areas.
- (iv) The final report must include an environmental sensitivity map indicating environmental sensitive areas and features identified during the assessment process.
- (v) The final report must include a map combining the final layout map superimposed (overlain) on the environmental sensitivity map.

(d) Specialist assessments

- (i) All the attached specialist studies must indicate and make recommendations for 25 wind turbine positions. There seems to be discrepancies between the number of turbines requested for the amendment, and the numbers being assessed in the various studies.
- (ii) The maps used within the specialist studies must comply with comment **c(i)** of this comments letter.

- (iii) The EAP must ensure that the terms of reference for all the identified specialist studies must include the following:
 - A detailed description of the study's methodology; indication of the locations and descriptions of the development footprint, and all other associated infrastructures that they have assessed and are recommending for authorisations.
 - Provide a detailed description of all limitations to the studies. All specialist studies must be conducted in the right season and providing that as a limitation will not be allowed.
 - Please note that the Department considers a 'no-go' area, as an area where no development of any infrastructure is allowed; therefore, no development of associated infrastructure including access roads is allowed in the 'no-go' areas.
 - Should the specialist definition of 'no-go' area differ from the Departments definition; this must be clearly indicated. The specialist must also indicate the 'no-go' areas buffer if applicable.
 - All specialist studies must be final, and provide detailed/practical mitigation measures and recommendations, and must not recommend further studies to be completed post EA.
 - Should specialist recommend specific mitigation measures for identified turbine positions, these must be clearly indicated.
 - Clearly defined cumulative impacts and where possible the size of the identified impact must be quantified and indicated, i.e. hectares of cumulatively transformed land.
 - A detailed process flow to indicate how the specialist's recommendations, mitigation measures and conclusions from the various similar developments in the area were taken into consideration in the assessment of cumulative impacts and when the conclusion and mitigation measures were drafted for this project.
 - Identified cumulative impacts associated with the proposed development must be rated with the significance rating methodology used in the process.
 - The significance rating must also inform the need and desirability of the proposed development.
 - A cumulative impact environmental statement on whether the proposed development must proceed.
- (iv) Should the appointed specialists specify contradicting recommendations, the EAP must clearly indicate the most reasonable recommendation and substantiate this with defensible reasons; and where necessary, include further expertise advice.

(e) The Environmental Management Programme (EMPr) to be submitted as part of the final report must include the following:

- (i) All recommendations and mitigation measures recorded in the final report and the specialist studies conducted.
- (ii) The final site layout map.
- (iii) Measures as dictated by the final site layout map and micro-siting.
- (iv) An environmental sensitivity map indicating environmental sensitive areas and features identified during the basic assessment process.
- (v) A map combining the final layout map superimposed (overlain) on the environmental sensitivity map.
- (vi) An alien invasive management plan to be implemented during construction and operation of the facility. The plan must include mitigation measures to reduce the invasion of alien species and ensure that the continuous monitoring and removal of alien species is undertaken.
- (vii) A plant rescue and protection plan which allows for the maximum transplant of conservation important species from areas to be transformed. This plan must be compiled by a vegetation specialist familiar with the site and be implemented prior to commencement of the construction phase.
- (viii) An avifauna monitoring and management plan to be implemented during the construction and operation of the facility. This plan must be drafted by a suitably qualified avifauna specialist.
- (ix) A re-vegetation and habitat rehabilitation plan to be implemented during the construction and operation of the facility. Restoration must be undertaken as soon as possible after completion of construction

- activities to reduce the amount of habitat converted at any one time and to speed up the recovery to natural habitats.
- (x) An open space management plan to be implemented during the construction and operation of the facility.
 - (xi) A traffic management plan for the site access roads to ensure that no hazards would result from the increased truck traffic and that traffic flow would not be adversely impacted. This plan must include measures to minimize impacts on local commuters e.g. limiting construction vehicles travelling on public roadways during the morning and late afternoon commute time and avoid using roads through densely populated built-up areas so as not to disturb existing retail and commercial operations.
 - (xii) A transportation plan for the transport of components, main assembly cranes and other large pieces of equipment.
 - (xiii) A storm water management plan to be implemented during the construction and operation of the facility. The plan must ensure compliance with applicable regulations and prevent off-site migration of contaminated storm water or increased soil erosion. The plan must include the construction of appropriate design measures that allow surface and subsurface movement of water along drainage lines so as not to impede natural surface and subsurface flows. Drainage measures must promote the dissipation of storm water run-off.
 - (xiv) A fire management plan to be implemented during the construction and operation of the facility.
 - (xv) An erosion management plan for monitoring and rehabilitating erosion events associated with the facility. Appropriate erosion mitigation must form part of this plan to prevent and reduce the risk of any potential erosion.
 - (xvi) An effective monitoring system to detect any leakage or spillage of all hazardous substances during their transportation, handling, use and storage. This must include precautionary measures to limit the possibility of oil and other toxic liquids from entering the soil or storm water systems.
 - (xvii) Measures to protect hydrological features such as streams, rivers, pans, wetlands, dams and their catchments, and other environmental sensitive areas from construction impacts including the direct or indirect spillage of pollutants.

The EAP must provide detailed motivation if any of the above requirements is not required by the proposed development and not included in the EMPr.

General

Please ensure that all mitigation recommendations are in line with applicable and most recent guidelines.

Please note that in terms of regulation 32 of EIA regulation 2014 as amended, the applicant is required within a specified timeframe to submit a report to this Department in light of the proposed amendments.

Further note that in terms of Regulation 45 of the EIA Regulations 2014 as amended, this application will lapse if the applicant fails to meet any of the timeframes prescribed in terms of these Regulations, unless an extension has been granted in terms of Regulation 3(7).

You are hereby reminded of Section 24F of the National Environmental Management Act, Act No 107 of 1998, as amended, that no activity may commence prior to an environmental authorisation being granted by the Department.

Yours faithfully



Mr Sabelo Malaza

Chief Director: Integrated Environmental Authorisations

Department of Environmental Affairs

Signed by: Mr Coenrad Agenbach

Designation: Deputy Director: Strategic Infrastructure Developments

Date: 13/12/2018

cc:	Mr P Fagnoli	Witberg Wind Power (Pty) Ltd	Email: p.fagnoli@buildingenergy.it; m.brambilla@buildingenergy.it
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Annexure 1

Format for Comments and Response Trail Report:

Date of comment, format of comment name of organisation/I&AP,	Comment	Response from EAP/Applicant/Specialist
27/01/2016 Email Department of Environmental Affairs: Strategic Infrastructure Development (John Soap)	Please record C&R trail report in this format Please update the contact details of the provincial environmental authority	EAP: (Noted)The C&R trail report has been updated into the desired format, see Appendix K EAP: Details of provincial authority have been updated, see page 16 of the Application form

EIA INFORMATION REQUIRED FOR WIND ENERGY FACILITIES

1. General site information

The following general site information is required:

- Descriptions of all affected farm portions
- 21 digit Surveyor General codes of all affected farm portions
- Copies of deeds of all affected farm portions
- Photos of areas that give a visual perspective of all parts of the site
- Photographs from sensitive visual receptors (tourism routes, tourism facilities, etc.)
- Facility design specifications including:
 - Type of technology
 - Structure height
 - Surface area to be covered (including associated infrastructure such as roads)
 - Structure orientation
 - Laydown area dimensions (construction period and thereafter)
 - Generation capacity
- Generation capacity of the facility as a whole at delivery points

This information must be indicated on the first page of the EIAr. It is also advised that it be double checked as there are too many mistakes in the applications that have been received that take too much time from authorities to correct.

2. Sample of technical details for the proposed facility:

Component	Description/ Dimensions
Location of the site	
Facility area	
SG Codes	
Site access	
Export capacity	
Proposed technology	
Hub height from ground level	
Rotor diameter	
Area occupied by substations	
Area occupied by both permanent and construction laydown areas	
Area occupied by buildings	
Width and length of internal roads	
Proximity to grid connection	
Type and height of fencing	

3. Site maps and GIS information

Site maps and GIS information should include at least the following:

- All maps/information layers must also be provided in ESRI Shapefile format
- All affected farm portions must be indicated
- The exact site of the application must be indicated (the areas that will be occupied by the application)

- A status quo map/layer must be provided that includes the following:
 - Current use of land on the site including:
 - Buildings and other structures
 - Agricultural fields
 - Grazing areas
 - Natural vegetation areas (natural veld not cultivated for the preceding 10 years) with an indication of the vegetation quality as well as fine scale mapping in respect of Critical Biodiversity Areas and Ecological Support Areas
 - Critically endangered and endangered vegetation areas that occur on the site
 - Bare areas which may be susceptible to soil erosion
 - Cultural historical sites and elements
 - Rivers, streams and water courses
 - Ridgelines and 20m continuous contours with height references in the GIS database
 - Fountains, boreholes, dams (in-stream as well as off-stream) and reservoirs
 - High potential agricultural areas as defined by the Department of Agriculture, Forestry and Fisheries
 - Buffer zones (also where it is dictated by elements outside the site):
 - 500m from any irrigated agricultural land
 - 1km from residential areas
 - Indicate isolated residential, tourism facilities on or within 1km of the site
- A slope analysis map/layer that include the following slope ranges:
 - Less than 8% slope (preferred areas for WIND TURBINE and infrastructure)
 - between 8% and 12% slope (potentially sensitive to WIND TURBINE and infrastructure)
 - between 12% and 14% slope (highly sensitive to WIND TURBINE and infrastructure)
 - steeper than 18% slope (unsuitable for WIND TURBINE and infrastructure)
- A site development proposal map(s)/layer(s) that indicate:
 - Foundation footprint
 - Permanent laydown area footprint
 - Construction period laydown footprint
 - Internal roads indicating width (construction period width and operation period width) and with numbered sections between the other site elements which they serve (to make commenting on sections possible)
 - River, stream and water crossing of roads and cables indicating the type of bridging structures that will be used
 - Substation(s) and/or transformer(s) sites including their entire footprint.
 - Cable routes and trench dimensions (where they are not along internal roads)
 - Connection routes to the distribution/transmission network (the connection must form part of the EIA even if the construction and maintenance thereof will be done by another entity such as ESKOM)
 - Cut and fill areas at WIND TURBINE sites along roads and at substation/transformer sites indicating the expected volume of each cut and fill
 - Borrow pits
 - Spoil heaps (temporary for topsoil and subsoil and permanently for excess material)
 - Buildings including accommodation

With the above information authorities will be able to assess the strategic and site impacts of the application.

4. Regional map and GIS information

The regional map and GIS information should include at least the following:

- All maps/information layers must also be provided in ESRI Shapefile format
- The map/layer must cover an area of 20km around the site
- Indicate the following:
 - roads including their types (tarred or gravel) and category (national, provincial, local or private)
 - Railway lines and stations
 - Industrial areas
 - Harbours and airports
 - Electricity transmission and distribution lines and substations
 - Pipelines
 - Waters sources to be utilised during the construction and operational phases
 - A visibility assessment of the areas from where the facility will be visible
 - Critical Biodiversity Areas and Ecological Support Areas
 - Critically Endangered and Endangered vegetation areas
 - Agricultural fields
 - Irrigated areas
 - An indication of new road or changes and upgrades that must be done to existing roads in order to get equipment onto the site including cut and fill areas and crossings of rivers and streams

5. Important stakeholders

Amongst other important stakeholders, comments from the National Department of Agriculture, Forestry and Fisheries must be obtained and submitted to the Department. Any application, documentation, notification etc. should be forwarded to the following officials:

Ms Mashudu Marubini
Delegate of the Minister (Act 70 of 1970)
E-mail: MashuduMa@daff.gov.za
Tel 012- 319 7619

Ms Thoko Buthelezi
AgriLand Liaison office
E-mail: ThokoB@daff.gov.za
Tel 012- 319 7634

All hardcopy applications / documentation should be forwarded to the following address:

Physical address:
Delpen Building
Cnr Annie Botha and Union Street
Office 270
Attention: Delegate of the Minister Act 70 of 1970

Postal Address:
Department of Agriculture, Forestry and Fisheries
Private Bag X120
Pretoria
0001
Attention: Delegate of the Minister Act 70 of 1970

In addition, comments must be requested from Eskom regarding grid connectivity and capacity. Request for comment must be submitted to:

Mr John Geeringh
Eskom Transmission
Megawatt Park D1Y38
PO Box 1091
JOHANNESBURG
2000

Tel: 011 516 7233
Fax: 086 661 4064
John.geeringh@eskom.co.za

B. AGRICULTURE STUDY REQUIREMENTS

- Detailed soil assessment of the site in question, incorporating a radius of 50 m surrounding the site, on a scale of 1:10 000 or finer. The soil assessment should include the following:
 - Identification of the soil forms present on site
 - The size of the area where a particular soil form is found
 - GPS readings of soil survey points
 - The depth of the soil at each survey point
 - Soil colour
 - Limiting factors
 - Clay content
 - Slope of the site
 - A detailed map indicating the locality of the soil forms within the specified area,
 - Size of the site
- Exact locality of the site
- Current activities on the site, developments, buildings
- Surrounding developments / land uses and activities in a radius of 500 m of the site
- Access routes and the condition thereof
- Current status of the land (including erosion, vegetation and a degradation assessment)
- Possible land use options for the site
- Water availability, source and quality (if available)
- Detailed descriptions of why agriculture should or should not be the land use of choice
- Impact of the change of land use on the surrounding area
- A shape file containing the soil forms and relevant attribute data as depicted on the map.

C. ASTRONOMY GEOGRAPHIC ADVANTAGE ACT, 2007 (ACT NO. 21 OF 2007)

The purpose of the Act is to preserve the geographic advantage areas that attract investment in astronomy. The entire Northern Cape Province excluding the Sol Plaatjie Municipality had been declared an astronomy advantage area. The Northern Cape optical and radio telescope sites were declared core astronomy advantage areas. The Act allowed for the declaration of the Southern Africa Large Telescope (SALT), MeerKAT and Square Kilometre Array (SKA) as astronomy and related scientific endeavours that had to be protected.

You must indicate the applicability of the Astronomy Geographic Advantage Act, Act No. 21 of 2007 on the application in the BAR/EIR. You must obtain comments from the Southern African Large Telescope (SALT) if the proposed development is situated within a declared astronomy advantage area.

DEPARTMENT OF ENVIRONMENTAL AFFAIRS AND
DEVELOPMENT PLANNING

ENQUIRIES:

Ms Jessica Christie (Directorate: Development Management)
Ms Simone Bugan Directorate: Waste Management
Mr Peter Harmse (Directorate: Air Quality Management)

DEPARTMENTAL REFERENCES:

16/3/3/6/4/2/1/C1/7/0204/18 (Development Management)
19/2/5/3/C1/7/WL0194/18 (Waste Management)
19/4/4/1/BC4 – Witberg WEF (Air Quality Management)

DATE: 14 December 2018

The Board of Directors
Savannah Environmental (Pty) Ltd
P.O. Box 148
SUNNINGHILL
2157

For attention: Ms Rozanne Els

Tel: (011) 656 3237

E-mail: publicprocess@savannahsa.com

Dear Madam

COMMENT ON THE AMENDMENT TO THE ENVIRONMENTAL AUTHORISATION FOR THE PROPOSED WITBERG WIND ENERGY FACILITY AND ASSOCIATED INFRASTRUCTURE ON VARIOUS FARMS NEAR MATJIESFONTEIN, LAINGSBURG MUNICIPALITY (DEA REF: 12/12/20/1966/AM6)

1. The e-mail correspondence of 14 November 2018 regarding the amendment of the environmental authorisation ("EA") issued by the National Department of Environmental Affairs for the proposed Wibergh wind energy facility ("WEF") and the Amendment Motivation Report dated November 2014 as received by the Department on 15 November 2018, refer.
2. Based on the information obtained in the Amendment Motivation Report, it is understood that the applicant is considering an updated turbine model for the development, and modifications to the following aspects that require a substantive amendment to the existing EA:
 - 2.1 Increase the range of hub height from 92m to a range from 92m up to 120m;
 - 2.2 Increase the range of rotor diameter from 116m to a range from 116m up to 136m;
 - 2.3 Increase the range of wind turbine capacity per wind turbine from 3MW to a range from 3MW to 5MW; and
 - 2.4 Decrease the number of wind turbines from 27 to 25.

Please find consolidated comment from various directorates within the Department on the Amendment Motivation Report.

3. Directorate: Development Management (Region 3) – Ms Jessica Christie (Jessica.Christie@westerncape.gov.za; Tel: (044) 805 8600):

3.1 Since it is requested that the amendments and appeal decisions for this project are consolidated into one environmental authorisation, it is unclear to this Directorate whether the consolidated EA, if granted, would be aligned with the requirements of the 2014 Environmental Impact Assessment ("EIA") Regulations (as amended). This Directorate believes that it should be aligned, and that all similarly listed activities should have been considered and included in the amendment application.

3.2 The Ornithological Collision Risk Modelling Update Report dated 25 July 2018 compiled by Ecology Consulting was based on the approved layout that authorised 27 turbines. Since the compilation of said report, a statement was issued by the specialist on 21 August 2018, assessing the new proposed layout of 25 wind turbines. It is unclear from the Ornithological Collision Risk Modelling Update Report how the collision risk modelling predictions were determined. It is however noted that there are tables with calculations, but the process is still not clear. This Directorate is concerned that interested and affected parties ("IA&Ps") may not understand the risk modelling process as the report is highly technical.

3.3 As with the collision risk modelling predictions indicated above, it is not clear how the predictions in the Avifauna Impact Report compiled by Birds Unlimited were determined. The following extract is taken from page 3 of the Avifauna Impact Report:

"The CRM estimated 0.36 Verreaux's Eagle adult and juvenile fatalities annually (Percival 2018) with taller 120-m turbines, (and 0.41 eagles for 105-m turbines, and 0.46 eagles for 92-m turbines). We conclude that by combining the two models we estimate that between 0.72 Verreaux's Eagles (120-m turbines), 0.82 eagles (105-m turbines) and 0.92 eagles (92-m turbines) may be killed annually. For Booted Eagles the equivalent figures are 0.08 Booted Eagle Aquila hieraetus fatalities (for all turbine heights) will occur per year. Further mitigations are required if the level of eagle fatalities exceeds 1.0 Verreaux's Eagles per year to reach acceptable levels."

3.3.1 However, further in the Avifauna Impact Report it is written that through the review of data from operational farms, a median rate of mortality was determined as 4.1 birds/turbine/year. Further along the report, (page 22) it is written that the model forecasting fatalities at the new hub height of 120m and 25 wind turbines is 400 birds (assumed per annum?) and for eagles alone, the model suggests a 2-fold increase in fatalities when hub heights are increased from 92m to 120m.

3.3.2 These values appear to question the suitability of the entire development proposal since the number of eagles in the area are already very limited and what can be deduced from all these calculations and predictions in the various reports, is that the populations of the eagles will be decimated within 2-3 years once the WEF is operational.

- 3.4 The comparative assessment of heritage impacts indicates that the main impact on heritage resources was identified in 2011. However, the methodology used in determining the impact ratings (extent, duration, magnitude, probability, significance, reversibility, etc.) was not included and it is thus difficult to understand how the description of the nature of the impact relates to the magnitude and the probability of the impact, given that the visual impact of the WEF is high, which obviously has a definite impact on the sense of place.
- 3.5 Section 5.5.1 of the Amendment Motivation Report states that *"The impact relates to the affect (sic) the proposal will have on the setting around the site, especially with respect to important heritage sites such as Matjiesfontein that has a remote sense of place on the edge of the great Karoo. The industrialising of the surrounding rural and remote areas will have an impact on the sense of place. This impact related mostly to the operational phase of the project."* It is unclear how the probability and the significance of the proposed amendment could be rated as *"probable"* and *"medium"* when the increased wind turbine specifications will cause a greater impact, compared to the probability of *"definitive"* and *"high"* negative significance for the authorised development.
- 3.6 The advantages and the disadvantages regarding the wind turbines as indicated in the Amendment Report to the Visual Impact Assessment ("VIA") compiled by Bernard Oberholzer dated 5 November 2018, are unclear.
- 3.6.1 Said report indicates that *"the relocation of three turbines further west"* could be regarded as an advantage. It is unclear which three turbines and where west is, is referred to.
- 3.6.2 The statement that *"the relocation of the substation on the same ridge as the turbines"* could also be an advantage, is also unclear as it is not indicated on a plan. Based on the maps provided, the relocation of the substation could not be detected as the Amendment Report to the VIA was the only specialist study that indicated this.
- 3.6.3 The powerline connection further east is also not understood, as it is unclear where the original position was. Again, no other specialist report indicated this change and the impact it may or may not have.
- 3.6.4 The impact that the access roads where the turbine positions have changed, was also not indicated in the Amendment Report to the VIA.
- 3.7 The Environmental Management Programme ("EMPr") dated November 2018 must comply with the requirements of section 24N of the National Environmental Management Act, 1998 (Act No. 107 of 1998) ("NEMA"). Since the EMPr was not yet approved, it must also comply with Appendix 4 of the EIA Regulations, 2014 (as amended). Unfortunately, the EMPr does not meet all the requirements of Appendix 4 of the EIA Regulations, 2014 (as amended) and should be updated to reflect the requirements of the applicable legislation.
- 3.8 The section in the EMPr dealing with bird and bat monitoring post-construction, indicates that for both animal species, post-construction monitoring must be undertaken in accordance with the relevant conditions of the environmental authorisation and the latest applicable bird monitoring guidelines for wind energy facilities. This Directorate is concerned about these statements as the specialists must provide monitoring procedures and recommendations for monitoring. The specialists

and environmental assessment practitioner should provide recommendations to the competent authority for post-construction monitoring, and the competent authority should then decide whether these recommendations are sufficient. Failure to include such information in the EMPr highlights severe gaps in knowledge in the amendment application.

3.9 Based on the insufficient information stated above, this Directorate recommends that the Amendment Motivation Report and relevant specialist studies be revised, and sufficient information be provided to allow this Directorate to provide more informed comments.

4. Directorate: Waste Management – Ms Simone Bugar (Simone.Bugar@westerncape.gov.za; Tel: (021) 483 4090):

4.1 The following amendments to the EMPr are proposed:

4.1.1 Aspect 16 in section 4.1 should be amended to ensure that waste skips should be covered as far as possible to limit the occurrence of wind-blown litter.

4.1.2 Vegetation clearance should preferably be phased as work is required in certain areas, as opposed to clearance of the entirety of the site at once. If this is not practical, and the entire site will be cleared at the start of the contract, the cleared areas must be stabilised immediately to control dust.

4.1.3 Wherever possible, indigenous vegetation should be trimmed rather than cleared.

4.1.4 Cleared vegetation is not allowed to be dumped anywhere, other than at an approved waste disposal facility or at an area agreed to by the environmental control officer.

4.1.5 Wherever possible and where the material is suitable, vegetation should be chipped for later use as mulch in landscaped areas or for stabilisation purposes; or it should be taken to a green waste/compost facility for compost production.

4.1.6 Invasive alien plants that are removed from the site should not be chipped for mulch if they are in a seed-bearing stage to prevent further distribution of alien plant seeds. Such material should be disposed of at a suitable waste disposal facility. Wherever possible, suitable larger stumps should be made available to the local community for further use.

4.1.7 The EMPr must provide an indication of the expected quantities of waste to be generated during the construction and operational phases of the proposed development. Whilst it is recognised that very little solid waste will be generated during the operational phase, please be advised that should more than 100m³ of general waste, and/or more than 80m³ of hazardous waste be stored for a period exceeding 90 days, the storage of such waste must adhere to the National Environmental Management: Waste Act, 2008 (Act No. 59 of 2008): National Norms and Standards for the Storage of Waste promulgated in Government Notice ("GN") No. 926 of 29 November 2013. If the above thresholds are met, the waste storage facility must also be registered on this Department's Integrated Pollutant and Waste Information System (<http://ipwis.pgwc.gov.za/ipwis3/public>).

5. Directorate: Air Quality Management – Peter Harmse (Peter.Harmse@westerncape.gov.za; Tel: (021) 483 4383):
- 5.1 This Directorate notes that potential dust impacts during the various phases of the proposed development have been addressed in the EMPr. The generation of dust must comply with the National Dust Control Regulations (GN No. R. 827 of 1 November 2013), promulgated in terms of the National Environmental Management: Air Quality Act, 2004 (Act No. 39 of 2004) ("NEM:AQA"). The Amendment Motivation Report and EMPr must be amended to include the requirements of the NEM:AQA and the National Dust Control Regulations.
- 5.2 The EMPr must provide more information on what the dust abatement measures will entail.
- 5.3 This Directorate notes that the Re-Modelling of the Noise Impact Assessment compiled by Safetech dated 1 August 2018 indicated that the proposed amendment would not exceed the current SANS 10103: 2008 limit of 45 dB(A) at any of the noise sensitive areas, including the cumulative impacts from other wind energy facilities. The findings of the Noise Impact Assessment re-modelling exercise are acceptable to this Directorate.
- 5.4 The applicant is reminded of its general duty of care and the remediation of environmental damage in terms of section 28(1) of the NEMA, 1998 which specifically states that: "*...Every person who causes, has caused or may cause significant pollution or degradation of the environment must take reasonable measures to prevent such pollution or degradation from occurring, continuing or recurring, or, in so far as such harm to the environment is authorised by law or cannot reasonably be avoided or stopped, to minimise and rectify such pollution or degradation of the environment...*"
6. Please direct any enquiries to the official indicated in this correspondence should you require any clarity on any of the comments provided.
7. The Department reserves the right to revise or withdraw comments and request further information based on any or new information received.

Yours faithfully



pp **HEAD OF DEPARTMENT**

DEPARTMENT OF ENVIRONMENTAL AFFAIRS AND DEVELOPMENT PLANNING

SOUTH AFRICAN NATIONAL ROADS AGENCY

publicprocess

From: Nicole Abrahams (WR) <AbrahamsN@nra.co.za>
Sent: Thursday, December 20, 2018 5:01 PM
To: Savannah Environmental Public Process
Cc: René de Kock (WR)
Subject: Witberg WEF
Attachments: 2018_NEW WAYLEAVE APPLICATION FORM WR.doc

Dear Ms Rozanne Els

The above listed project bears reference.

I would hereby wish to register as an I&AP for this particular project.

The South African National Roads Agency SOC Limited (SANRAL) has received background information and a site layout plan for this project and based on the proximity of the project in relation to the nearest National Road N1, it appears that SANRAL could be impacted by this development.

If services need to be constructed over or under the national road, (in this case the N1) or within 60m measured from the road reserve fence, the service owner must apply for a written permission from SANRAL, before any work may be carried out. Attached please find an application form for the proposed encroachment.

I trust that you will find the above in order.

Regards

Nicole Abrahams
Environmental Coordinator
Western Region
, Bellville, Western Cape, 7530,
T: 021 957 4602 | M: 062 215 8945
AbrahamsN@nra.co.za | www.sanral.co.za
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WESTERN CAPE PUBLIC ROADS AND TRANSPORT



**Western Cape
Government**

Transport and Public Works

ROAD NETWORK MANAGEMENT

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tel: +27 21 483 4669

Rm 335, 9 Dorp Street, Cape Town, 8001

PO Box 2603, Cape Town, 8000

REFERENCE: 16/9/6/1-15/12 (Job 19119)

ENQUIRIES: Ms GD Swanepoel

DATE: 12 December 2018

Savannah Environmental
PO Box 148
SUNNINGHILL
Gauteng
2157

Attention: Ms R Els

Dear Madam

WITBERG WIND ENERGY FACILITY: AMENDMENT OF ENVIRONMENTAL AUTHORISATION

1. Your letter dated 14 November 2018 refers.
2. It is understood that Witberg Wind Farm (Pty) Ltd received an Environmental Authorisation for a Wind Energy Facility on 13 October 2011.
3. Due to the reduction, change in location and specification of the turbines as well as other changes, it prompted an application for an amendment of the environmental authorisation.
4. This Branch offers no objection to the application.

Yours faithfully

SW Carstens

For CHIEF DIRECTOR: ROAD NETWORK MANAGEMENT

ENDORSEMENTS

1. Savannah Environmental
Attention: R Els (e-mail: Rozanne@savannahsa.com)
2. Mr SW Carstens (e-mail)
3. Mr F Fakier (e-mail)

COMMENTS RECEIVED ON REVISED MOTIVATION
REPORT

(To be included in Final Report)