EOH

Coastal & Environmental Services

25 July 2016

ADDENDUM TO THE BRANDVALLEY WIND FARM EIA: AGRICULTURAL AND SOIL ASSESSMENT

To whom it may concern

This letter serves as an addendum to the Final Agricultural & Soil Assessment for the proposed new Brandvalley Wind Farm located in Western Cape Province of South Africa. It was drafted in response to comment from the Department of Environmental Affairs (DEA) requiring a cumulative environmental impact statement of the proposed development on the agricultural surroundings found onsite.

1.1. Issue identified

The following issues identified during the assessment of the Brandvalley Wind Farm will have a cumulative impact on the agricultural environment:

1. Impacting on local soil types (Negative impact)
2. Increase in erosion potential (negative impact)
3. Loss of agricultural land (negative impact)
4. Decommissioning and removal of renewable energy infrastructure on agricultural land (positive impact)

Each of these issues is discussed below.

1.2. Discussion

The following renewable projects are found within 50km of the proposed Brandvalley Wind Farm (Figure 1) and have completed an Environmental Impact Assessment (EIA) or are currently busy conducting an EIA:

- Hidden Valley Wind Farm
- Sutherland Wind Farm & Solar PV
- Suurplaat Wind Farm
- Perdekraal Wind Farm
- Konstabel Wind Farm
- Rietkloof Wind Farm
- Gunsfontein Wind Farm & Solar PV
- Roggeveld Wind Farm
- Komsberg Wind Farm
- Witberg Bay Wind Farm
- Laingsburg Wind Farm & Solar PV

All above-mentioned projects locations as shown in Figure 1 below were considered in the cumulative impact statement. It must be noted however that although an Environmental Authorisation (EA) may be received for most of these projects, not all will be constructed. All these projects all still subjected to a Department of Energy (DoE) procurement process which will determine which of these projects may proceed to construction phase. This will have an impact on the overall cumulative impact statement.

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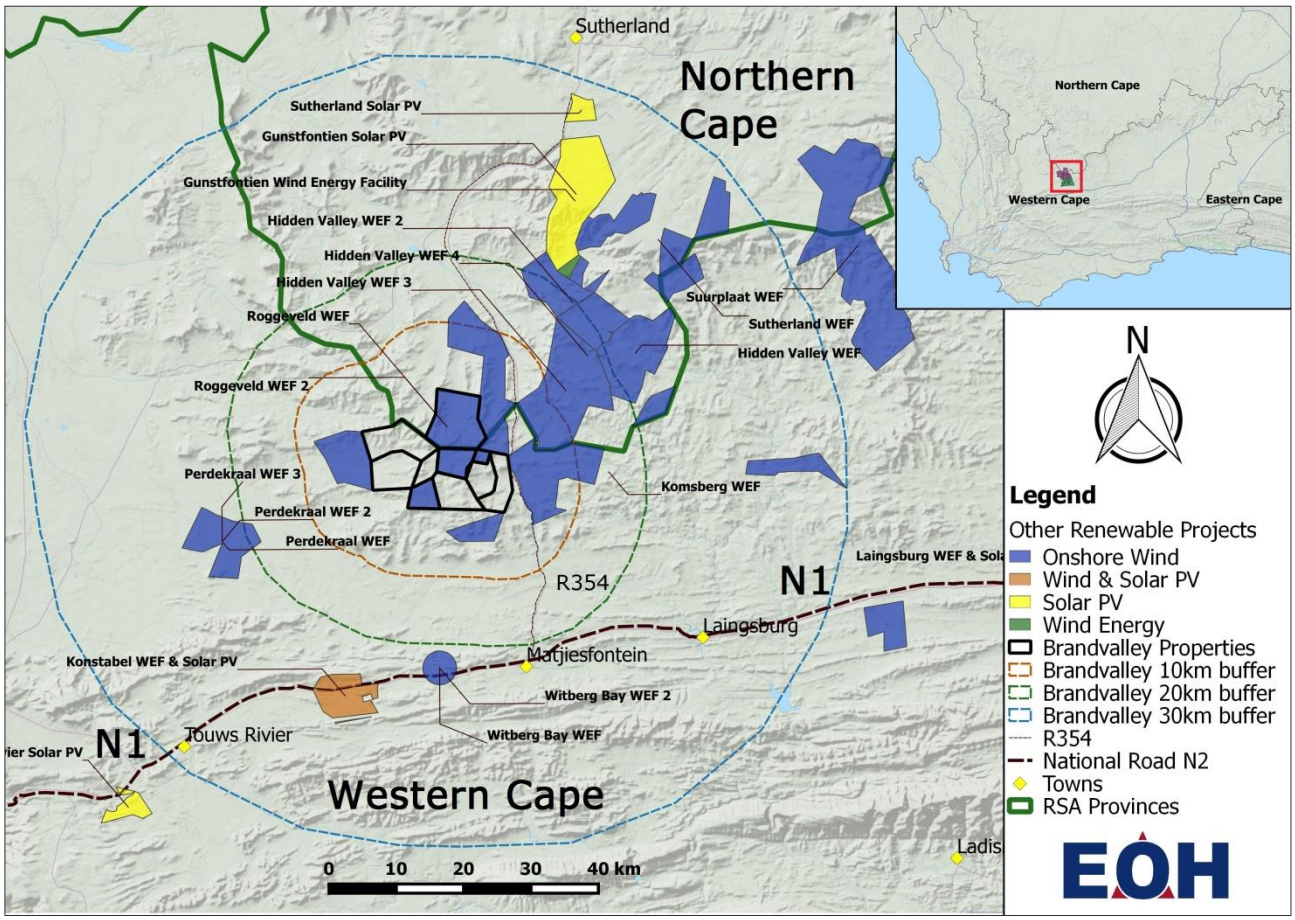

Figure 1. Renewable projects within 50km of the proposed Brandvalley Wind Farm.

1.3. Impact statement

Each of the cumulative impacts identified in Section 1.1 above are discussed below:

Issue 1: Impacting on local soil types

The planning and design of a new wind farm will result in the loss of local soil types. These soil types mostly include Mispah & Glenrosa soil types (shallow and/or rocky soils) for all projects in the 50km radius as this is the dominant soil types. Both these soil types are not suitable for irrigation or dryland cropping but low potential grazing of both livestock (sheep & goats mostly) and game do occur. Some of the younger and deeper soils found in river-valley bottoms are utelised for crop irrigation provided that water is available. Although a high cumulative impact is anticipated due to the number of projects that will impact on these soil types, a LOW cumulative significance is allocated based on the following:

- Mispah & Glenrosa soils are commonly found onsite
- It has no high value use other that low grazing
- Irrigated soils are avoided by the proposed development

Issue 2: Increase in erosion potential

The increase in impacted areas and hard surfaces (hardstands and roads) will increase run-off and may potentially lead to an overall increase in soil erosion potential for the local area. This may be further enhanced as a result of inappropriate stormwater design for each project. The local area is allocated a low erosion potential by the Department of Agriculture (http://www.agis.agric.za/agisweb/agis.html). A LOW cumulative impact is allocated based on the following:

- The current erosion potential is low

A study of some of these projects (including Hidden Valley, Rietkloof, Konstabel & Gunsfontein wind farms) shows that the development of a stormwater management plan is required prior to commencement of construction for each of these sites. It is therefore emphasised that a stormwater management plan must be implemented for the proposed Brandvalley Wind Farm.

Issue 3: Loss of agricultural land

Design and construction of the proposed Brandvalley Wind Farm will contribute approx. 15672ha to the overall potential loss of around 180 000ha (calculated at an average of 15 000ha per project) of agricultural land. It has been previously mentioned that a low agricultural potential has been allocated to the area. This is due to the unsuitability of the local soil types for agricultural crop purposed as well as the low carrying capacity of the local veld. Although irrigation do occur onsite, almost all projects will avoid these areas resulting in a LOW significance for cropland. The cumulative impact on grazing land is considered as LOW due to the following:

- The area has a low carrying capacity
- Agricultural potential is low

Issue 4: Decommissioning and removal of renewable energy infrastructure on agricultural land

The decommissioning and removal of renewable energy infrastructure in 20-25 years' time will result in a cumulative increase of up to 15 000ha of available agricultural land for each project that was constructed.

1.4. Conclusion

Even though there are a large number of renewable energy projects in the area, the overall cumulative impact is considered as LOW. Each Wind Farm is spread over a large geographical area, resulting in limited impact on local soil types as well as agricultural potential for individual farms.

Impact	Effect			Risk or Likelihood	Overall Significance
	Temporal Scale	Spatial Scale	Severity of Impact		
Without Mitigation	Medium-term	Regional	Slight	May occur	**Low -**
With Mitigation	Medium-term	Regional	Slight	May occur	**Low -**

Yours faithfully

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CUMULATIVE IMPACTS FOR THE PROPOSED WEF

DEA Comment	Action	Yes/No	Proof in Report/Addendum
Due to the number of similar applications in the area, all the specialist assessments must include a cumulative environmental impact statement. Identified cumulative impacts must be clearly defined and where possible the size of the identified impact must be indicated, i.e. hectares of cumulatively transformed land.	Is a cumulative impact statement included in the report?	Yes	A separate letter from the specialist is submitted on this matter and must be read as an Addendum to the Agricultural & Soil Assessment; Section 1.3
	Are cumulative impacts clearly defined?	Yes	Refer to Addendum; Section 1.1
	Has the size of the identified cumulative impact been indicated in the report?	Yes	Refer to Addendum; Section 1.1
Identified cumulative impacts significance rating must be rated with significance rating methodology approved with the acceptance of the scoping report.	Do the cumulative impacts include a significance rating as per the assessment methodology?	Yes	Refer to Section 9.3; page 34 of the Final Report
Detailed cumulative impact assessments must be provided in the EIAr for all specialist studies conducted. The specialist studies must provide proof that other specialist reports that was conducted for renewable energy projects in the area were reviewed and indicated how the recommendations, mitigation measures and conclusions have been taken into consideration when the conclusion and mitigation measures were drafted for this project.	Does the report provide proof that other specialist reports conducted for renewable energy projects in the area were reviewed and indicate how the recommendations, mitigation measures and conclusions have been taken into consideration?	Yes	Refer to Addendum; Section 1.2 & 1.3

Signature of the specialist:

Mr. Roy de Kock MSc.

Name of company / specialist:

21 July 2016

Date: