

# Holland & Associates



Environmental Consultants

Impact Assessments - Environmental Management Programs - Compliance Monitoring - Process Review

## Notes of Meeting

### ESTABLISHMENT OF A WIND ENERGY FACILITY SITUATED ON THE EASTERN PLATEAU (SOUTH), NEAR DE AAR, NORTHERN CAPE: PART 1 APPLICATION FOR AMENDMENT OF THE ENVIRONMENTAL AUTHORISATION (DFFE REF: 12/12/20/2463/1)

#### MEETING WITH BIRDLIFE SOUTH AFRICA

<i>Date</i>	<i>Time</i>	<i>Venue</i>
7 February 2023	12h30- 13h47	Microsoft Teams (Virtual)

<b><u>ATTENDEES:</u></b>		
Nicole Holland	(NH)	Holland & Associates Environmental Consultants
Tilly Watermeyer	(TW)	Holland & Associates Environmental Consultants
Samantha Ralston-Paton	(SR)	BirdLife South Africa
Chris van Rooyen	(CR)	Chris van Rooyen Consulting (Avifauna Specialist)
Albert Froneman	(AF)	Chris van Rooyen Consulting
Andrew Pearson	(AP)	Mulilo Renewable Project Developments (Pty) Ltd on behalf of Mulilo De Aar 2 South (Pty) Ltd
Constantin Hatzilambros	(CH)	Mulilo Renewable Project Developments (Pty) Ltd on behalf of Mulilo De Aar 2 South (Pty) Ltd
Chris Aberdein	(CA)	Mulilo De Aar 2 South (Pty) Ltd
<b>1.</b>	<b>Introduction and Purpose of Meeting</b>	
1.1	NH outlined the purpose of the meeting, i.e. <ul style="list-style-type: none"><li>To provide an opportunity for open discussion with BirdLife SA (BLSA) and the project team (including the avifaunal specialist and Applicant).</li><li>To provide clarity on some of the questions / comments in BLSA's comment dated 26 January 2023 in the interim, while the formal Comments and</li></ul>	

	<p>Response Report (CRR) is still being compiled.</p> <p>The comment letter (dated 26 January 2023) submitted by BLSA for the EA Amendment process was used to guide the discussion that followed. The “Discussion Points” below accordingly use the same headings as in the aforementioned BLSA letter.</p>
<b>2.</b>	<b>Discussion Point 1: New Information</b>
2.1	<p>AP asked SR if she had had a chance to read through the draft amended EMPr yet, and if so, whether it answered some of her questions raised in the BLSA comment. SR responded that she has not had a chance to look at the draft amended EMPr as yet.</p> <p>CvR confirmed that the avifaunal specialists are well aware of the new information referred to in the BLSA letter and all applicable and available information was taken into account when preparing their report. He highlighted that it is important to note and recognise that this project already has environmental authorisation, and such environmental authorisation was obtained many years before the new guidelines came into effect, and should therefore be viewed in a different light than a new application. When considering projects with existing environmental authorisation, one needs to look at it from the perspective of bringing it in line with the new guidelines as best as possible. Considering the evolution of guidelines, the avifaunal specialists asked Mulilo to provide them with the most conservative layout possible taking cognisance of the ‘new information’ e.g. VERA modelling.</p> <p>SR noted that many projects approved ten years ago should not have been approved if one considers the latest information on risks to birds, for example, the latest guidelines. It creates a difficult situation where there is an expectation to develop and an obligation to minimise impacts on biodiversity. In order to now accommodate the development and try and minimise impacts on biodiversity, the extent of mitigation measures required may result in the project being unfeasible (as mitigation can have significant cost implications for developers/ operators). She also stated that everyone needs to understand what the desired outcome is (e.g. no loss, nett gain or some loss) in terms of minimising impacts on avifauna.</p> <p>CH provided SR with the status of the project, i.e. how close the project is to commencing with construction e.g. the Power Purchase Agreement (PPA) has been finalised with the off-takers [REDACTED]. He explained Mulilo’s relationship with [REDACTED] and explained their focus on ESG, high environmental standards, and that the project is important in terms of [REDACTED] decarbonisation programme. He also stated that the De Aar 2 South WEF project should be distinguished from the [REDACTED] WEF’s nearby, as it involves different stakeholders, has different developers and will have a different operator.</p> <p>SR responded by saying that in reality, projects change hands, ESG policies change, shareholders change, therefore in order to ensure that mitigation measures are implemented effectively, they need to be specific, timebound, measurable, as well as legally binding.</p> <p>CA added to CH’s statement by stating that the PPA has been signed with [REDACTED] and should the project be delayed at this stage or not be allowed to proceed, their effective</p>

decarbonisation strategy would be greatly hindered, and this would be a major setback and a great pity, as [REDACTED] is a significant carbon emitter making great strides in their journey towards decarbonisation. He emphasised that the project should also be considered in light of the country's urgent need for electricity.

SR responded to this by saying that BLSA are very much in support of renewable energy development and encourage companies to decarbonise. SR indicated, however, that BLSA are not willing to support to this project in the current format, but recognise that it already has Environmental Authorisation, and that BLSA would be more comfortable, but still not entirely supportive of the project, if stringent mitigation measures were incorporated into legally binding documents such as the EA and EMPr for the project. SR stated that she has not yet had a chance to review the EMPr and thus cannot comment on the measures that have been incorporated into it. NH responded that the EMPr and Layout Plan finalisation process is currently being run as a separate process to the EA amendment process, and its public participation period ended in December 2022. BLSA had been invited to comment on the draft amended EMPr and Final Layout Plan however no comment was received. NH also emailed the draft amended EMPr to SR again on 30 January 2023, in light of comment 3(c) in BLSA's comment.

SR requested the EMPr was emailed through to her again and then requested to go through the draft EMPr during the meeting.

NH noted that once approved, the Environmental Management Programme (EMPr) would be an extension of the conditions of the EA, as specified in Condition 18 of the EA which states "*The provisions of the approved EMPr including are an extension of the conditions of this EA and therefore noncompliance with them would constitute noncompliance with the EA*". Accordingly, whatever is contained within the approved EMPr is legally binding on the holder of the EA.

Whilst the EMPr was being pulled up onto the shared screen, AP discussed the auditing process with SR. AP asked SR whether she would be satisfied if audits were to be conducted more frequently than what it currently stipulated in the draft EMPr i.e. quarterly and not bi-annually, and whether BLSA would be satisfied if each audit report was sent to BLSA as well for commenting. SR confirmed that they would like the audit reports to be sent to BLSA (in addition to the avifaunal monitoring reports). She also stated that it is important to be clear on what exactly is to be audited, in other words, the objectives, aims and measures in the EMPr need to be adequately detailed and auditors should review the outcome of monitoring, not just check if monitoring has been done. AP responded to this by saying that the frequency of the audits could be increased to quarterly, the requirements would be audited in consultation with the avifaunal specialist, and the audit reports would be submitted to both BLSA and DFFE.

The draft EMPr was shared on the MS team platform, and was reviewed briefly during the meeting. NH noted that the avifaunal specialists' recommended mitigation measures have been pulled through into the EMPr. SR stated that she needs to go through the EMPr carefully, and that she will provide written feedback to Holland & Associates Environmental Consultants on the recommendations, including the objectives (i.e. the objective should be no fatalities, and the performance indicator should be the number of fatalities).

<b>3.</b>	<b>Discussion Point 2: Cumulative Impacts</b>
3.1	<p>CvR explained his findings from his cumulative impact assessment. He stated that the contribution of the De Aar 2 South WEF project to the overall cumulative impact is relatively minor due to the lower number of turbines (26 as compared to the 103 originally authorised). He said the pre-mitigation significance of the cumulative impact of all the renewable energy projects within a 30km radius is high, as indicated in his report, but that this could be reduced to moderate if all recommended mitigation measures are implemented at all those projects.</p> <p>SR is of the opinion that a biologically meaningful radius could have been considered in the assessment and that information could have been gathered from more wind farms in the region.</p> <p>CvR responded to this, explaining the difficulties in obtaining this information from surrounding projects and believes that this is out of the scope of the Part 1 EA amendment. He also mentioned that if better mitigation measures were implemented at surrounding WEF projects (such as those proposed as part of this application), the overall cumulative impact could be further reduced.</p> <p>Whilst on this point, CvR provided insight into the progress made at two operational WEF projects near De Aar, in terms of reducing impacts on avifauna. This mainly related to measures installed (e.g. extra insulation, re-configuration of poles) to reduce the number of electrocutions. It was noted that the internal reticulation at the De Aar 2 South WEF project would be constructed with a bird-friendly design to minimise the electrocution risk for birds, and therefore will not experience the same fatalities from electrocutions.</p>
<b>4.</b>	<b>Discussion Point 3: Operational Phase Mitigation</b>
4.1	<p>SR elaborated on point 3 “Operational Mitigation” in the BLSA letter dated 26 January 2023, and mentioned that although already in use on other wind farms in South Africa, there is much unknown about the effectiveness of certain mitigation measures. She is concerned that when particular mitigation measures are not effective, and further action is required to improve mitigation, there will not be budget available to do so. Ultimately, BLSA want comfort that the project has budgeted for all possibilities regarding mitigation measures.</p> <p>AP said that Mulilo have a good understanding of what is required in terms of mitigation and thus it is well planned for and integrated into the project costs. Blades will be painted at the manufacturing stage, the Shut Down on Demand (SDoD) will be easier to implement because there is already an experienced field work team in the vicinity (on the neighbouring operational wind farms), as well as local service providers who can create jobs and expand their capacity.</p> <p>CH stated that the production losses and costs associated with the mitigation measures have been catered for in the financial model and yield assessment for the project. The project has been developed on the basis of the mitigation measures required. Ultimately, the mitigation measures will become legally binding as a result of being included in the EMPr which will be a legally binding document, thus they will have to be implemented and the project will have to ensure their effectiveness.</p>

	<p>SR asked what will happen if SDoD fails, for example due to human error?</p> <p>CvR asked what SR meant by 'fails', and what is the project aiming for?</p> <p>SR said that the project should be aiming for zero (avifaunal) fatalities.</p> <p>CvR asked whether this is practical and realistic? The suite of mitigation measures (blade painting, SDoD and automated curtailment) to be implemented consists of (probably) the most powerful combination of the best mitigation measures implementable and available in South Africa today.</p> <p>SR said that a final safety net is required as there is a chance that these mitigation measures will not work, or work less effectively than hoped. She stated that it needs to be clear in the EMPr what the project is aiming for.</p> <p>CvR said that the project should be aiming to prevent biologically significant fatality levels, not zero fatalities, which would be unrealistic. He said that they should be aiming to keep to a fatality level that does not trigger long-term population decline.</p> <p>SR agreed with CvR that the project should be aiming to avoid biologically significant fatality levels, provided that the cumulative impact is considered. CvR agreed to this.</p> <p>AP stated that if the mitigation measures are found to be not as effective as expected, the first option must be to try fix, or improve the mitigation measure, for example employ more monitoring staff or install cameras to assist with SDoD. Only if that does not work, only then must offsets be considered. SR agreed with AP in this regard.</p> <p>SR said that BLSA would like to have biodiversity offsets written into the EMPr, in the event that all mitigation measures are not effective even after adjustments and improvements have been made and implemented. BLSA do not want a situation where 20 years are spent trying to fix mitigation measures that are ineffective – there must be a compensation requirement in place in the event that mitigation ultimately fails.</p> <p>CH asked SR for guidance with respect to biodiversity offsets but SR said that this would be difficult as it is a new concept in the context of bird fatalities at wind farms in South Africa. SR stated that they must agree on the principles of the biodiversity offsets which should be contained in the EMPr and then flesh out the details if and when they become necessary.</p> <p>CH said that Mulilo would discuss biodiversity offsets with the avifaunal specialists and the EAP and provide an answer to the comment in the Comments and Responses Report (for DFFE).</p>
4.2.	<p>SR asked for a response to her queries in the letter pertaining to curtailment.</p> <p>AP explained that automated curtailment was brought in as a third layer/safety net of mitigation measures. AP added that all turbines are subject to curtailment already, in that SDoD is a form of curtailment. The automated curtailment is additional to this.</p>

	<p>CvR explained that Mulilo had confirmed that the project could automatically curtail 8 turbines in order for the wind farm to remain viable. He pointed out that all turbines are subject to SDoD which is a form of curtailment. The 8 turbines to be automatically curtailed were selected in consultation with Dr Rob Simmons and were selected on the basis of VERA model high risk areas, flight activity and proximity to nests which data was obtained during monitoring.</p> <p>AP added that the turbines selected to be automatically curtailed were not selected because they are low energy-yielding turbines, in fact on the contrary, they are some of the highest energy-yielding turbines but the environmental impact was considered to be of greater importance than the economic impact.</p> <p>SR asked whether it was economically feasible to automatically curtail more turbines. Mulilo confirmed that it was not.</p> <p>SR commended Mulilo for all the additional work to mitigate impacts on birds, and indicated that she notes and appreciates the extensive thought and effort that has gone into designing the mitigations.</p> <p>SR said she is concerned that the precedent set by a project like this would lead to other projects being authorised and constructed where the environmental impact is significant but the mitigation measures are not as extensive.</p> <p>CvR responded to SR's comment by emphasising how important it was to consider the fact that this project already has environmental authorisation and thus a reasonable compromise must be reached. For any new projects, they would be aware of with all current guidelines upfront and would have to comply with them. This project could be seen as a reasonable compromise and is a significant improvement (given the significant reduction in the number of turbines) to what is currently authorised.</p> <p>CH mentioned that Mulilo is very much aware of the new guidelines in respect of its new developments and has in fact walked away from many new potential projects because of VERA modelling results and the recommendations contained in current guidelines.</p>
<b>5.</b>	<b>Discussion Point 4: Conditions of Approval</b>
5.1	<p>NH reiterated that the EMPr will become an extension of the conditions of the EA once it is approved. In other words, it will be a legally binding document and non-compliance with the EMPr would be non-compliance with the EA.</p> <p>SR requested that the main requirements relating to mitigation measures be added into the EA and not only be contained in the EMPr, simply because the EA is perceived to carry more weight than the EMPr and people tend to pay less attention to the EMPr. She also stated that she would like the audit requirements to go into the EA. AP agreed to this.</p> <p>SR confirmed that she would look at the EMPr and provide feedback regarding mitigation measures pertaining to avifauna. SR asked if the EMPr has been finalised or if there is still opportunity to make refinements.</p>

	NH confirmed that the amended EMPr is in the process of being finalised (following the end of the public comment period) and that some changes could therefore still be made to address BLSA's comments, before submission of the final amended EMPr to DFFE for approval.
<b>6</b>	<b>Action Points / Way Forward</b>
6.1	SR will look through the EMPr and provide comments/ recommendations to Holland & Associates Environmental Consultants.
6.2	The EAP will update the amended EMPr, where necessary, once SR provides comments/ recommendations on the EMPr.
6.3	The EAP and Mulilo to finalise responses to BLSA's comment in the Comments & Response Report.
6.4	The CRR is being compiled, which will include all I&AP comments received (including BLSA's comment dated 26 January 2023) and the project team's responses thereto. The CRR will be submitted to DFFE together with the Final Amendment Report in due course, for decision making. A copy of the project team's responses to BLSA's comment will be made available to BLSA for information purposes when the final EA amendment documents are submitted to DFFE for decision making.
6.5	The notes of this meeting will be drafted and included with the Public Participation Process documentation in the final Amendment Motivation Report for the EA amendment process, that will be submitted to DFFE for decision making.
6.6	SR thanked Mulilo for taking the time to organise and have this meeting with BLSA.  NH thanked all attendees.  The meeting closed at 13h47.
<b>7</b>	<b>Meeting Outcomes Summary</b>
	All parties agreed that the meeting was beneficial and constructive. The Applicant gave clarity to BLSA on a number of concerns, and gave confirmation that all requirements and mitigations as described in the EMPr will be timeously and effectively implemented. There was agreement that BLSA will be regularly updated and consulted on the project's progress and implementation. BLSA will review the EMPr and provide further comment to include in the separate EMPr and final layout process.

Signed:



---

Name: **Samantha Ralston-Paton**

On behalf of BirdLife South Africa

Date: **20 February 2023**



Digitally signed by Constantin Hatzilambros  
DN: cn=Constantin Hatzilambros,  
o=Mulilo Renewable Project  
Developments (Pty) Ltd, ou,  
email=constantin@mulilo.com, c=ZA  
Date: 2023.02.20 16:06:02 +0200

---

Name: **Constantin Hatzilambros**

On behalf of Mulilo De Aar 2 South (Pty) Ltd

Date: **20 February 2023**

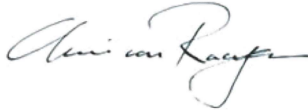


---

Name: **Nicole Holland**

On behalf of Holland & Associates Environmental Consultants

Date: **20 February 2023**



---

Name: **Chris van Rooyen**

On behalf of Chris van Rooyen Consulting

Date: **20 February 2023**