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**Reference:** 00100/20190130

**Date:** 30 January 2019

Eco Impact Legal Consulting (PTY) Ltd  
P.O.Box 45070  
Claremont  
7735

**ATTENTION:** Nicolaas Hanekom

**RE:** SPECIALIST EXTERNAL REVIEW OF THE ECOLOGICAL IMPACT ASSESSMENT (TERRESTRIAL AND AQUATIC ECOLOGY, FAUNA AND AVIFAUNA) FOR THE PROPOSED 300MW PHOTOVOLTAIC ELECTRICITY GENERATION FACILITY ON PORTIONS 6 AND 3 OF FARM 187 OLYVENKOLK, KENHARDT DISTRICT

Dear Nicolaas Hanekom

Nemai Consulting (PTY) Ltd was requested to undertake a specialist external review (peer review) of the ecological impact assessment (terrestrial and aquatic ecology, fauna and avifauna) report compiled as part of the Environmental Authorisation process for the 300MW Photovoltaic electricity generation facility on portions 6 and 3 of farm 187 Olyvenkolk, Kenhardt District, undertaken by Mr. Nicolaas Hanekom of Eco Impact Legal Consulting (PTY) Ltd. The Terms of Reference (ToR) of the review was focused on the following:

- ❖ To review the report in terms of the current minimum requirements for biodiversity assessments in terms of Appendix 6 of General Notice (GN) 326 (7 April 2017) of the National Environmental Management Act (NEMA) of 1998;
- ❖ A CV clearly showing expertise of the peer reviewer;
- ❖ The ToR for the peer review (on page one of the attached) should also include the RED text:
- ❖ Acceptability of the terms of reference;
- ❖ Is the methodology clearly explained and acceptable;
- ❖ Evaluate the validity of the findings (review data evidence);
- ❖ Discuss the suitability of the mitigation measures and recommendations;
- ❖ Identify any short comings and mitigation measures to address the short comings;
- ❖ Evaluate the appropriateness of the reference literature;
- ❖ Indicate whether a site-inspection was carried out as part of the peer review; and
- ❖ Indicate whether the article is well-written and easy to understand.
- ❖ Assess the acceptability of the initial reports ToR
- ❖ Assess the document/ report in terms of its fulfilment of the Terms of Reference set;
- ❖ Consider whether the report is entirely objective;
- ❖ Consider whether the report is technically, scientifically and professionally credible;
- ❖ Consider whether the method and the study approach is defensible;
- ❖ Identify whether there are any information gaps, omissions or errors;
- ❖ Consider whether the recommendations presented are sensible and present the best options;
- ❖ Consider whether there are alternative viewpoints around issues presented in the report and if these are clearly stated;

- ❖ Consider whether the style of the report is written so as to make it accessible to non-specialists, technical jargon is explained and impacts are described using comparative analogies where necessary; and
- ❖ Report on whether normal standards of professional practice and competence have been met.

The following sections present the findings of the above assignment aligned with the requirements set out in GN326 of 7 April 2017.

1. A CV clearly showing expertise of the peer reviewer;

Avhafari Phamphe is currently employed by Nema Consulting (PTY) Ltd and focuses on the facilitation of Ecological/Biodiversity Assessments, Environmental Impact Assessment, Environmental Management Programme, Basic Assessment (BA), Rehabilitation Plan, Search, Rescue & Relocation Plan and Biodiversity Action Plan processes. As a Senior Biodiversity Specialist, he is also responsible for peer reviewing external freshwater and wetlands reports as part of the BA and EIA reports. He has attended and completed a wetland course. Avhafari is a passionate field biologist with more than 16 years' experience in ecological assessments throughout Southern, Eastern, Central and West Africa. Further skills include Alien vegetation clearing and monitoring courses. He has compiled several ecological and biodiversity reports in all provinces of South Africa.

He has been involved in various projects throughout Africa (including South Africa, Rwanda, Ghana and Mozambique) focusing on terrestrial ecological assessments which involve phytosociological community assessments, Red Data Listed faunal and floral species assessments, alien and invasive species control methods and rehabilitation plans. He holds a BSc Botany (Hons) from University of Venda (Univen) and holds a MSc (Botany) from the University of Pretoria (UP). He is also registered with the South African Council for Natural Scientific Professions (SACNASP) in the field of ecological science.

Specialist reports include:

- Biodiversity Specialist for the proposed New Wastewater Treatment Works development. Compile a Terrestrial Ecology Specialist Study, which forms part of the Environmental Impact Assessment process, which assess the impacts that the proposed New Wastewater Treatment will have on the flora and fauna on site.
- Biodiversity Specialist for proposed 400kV Powerline. Compile a Terrestrial Ecology Specialist Study, which forms part of the Environmental Impact Assessment process, which assess the impacts that the proposed powerline will have on the flora and fauna on site.
- Biodiversity Specialist for proposed Development for Augmentation of the Western Cape Water Supply System. Compile a Terrestrial Ecology Specialist Study, which forms part of the Environmental Impact Assessment process, which assess the impacts that the proposed Water Supply System will have on the flora and fauna along the route.
- Biodiversity Specialist for proposed Development of the Makalu B Transmission Line. Compile a Terrestrial Ecology Specialist Study, which forms part of the Environmental Impact Assessment process, which assess the impacts that the proposed distribution line will have on the flora and fauna along the route.
- Biodiversity Specialist for proposed Development of the Makalu B Transmission Line. Compile a Terrestrial Ecology Specialist Study, which forms part of the Environmental Impact Assessment process, which assess the impacts that the proposed transmission line will have on the flora and fauna along the route.
- Biodiversity Specialist for proposed development of the Foxwood Dam. Compile a Terrestrial Ecology Specialist Study, which forms part of the Environmental Impact Assessment process, which assess the impacts that the proposed Dam will have on the flora and fauna on site.
- Biodiversity Specialist for proposed development of Ncwabeni Dam. Compile a Terrestrial Ecology Specialist Study, which forms part of the Environmental Impact Assessment process, which assess the impacts that the proposed Dam will have on the flora and fauna on site.

- Biodiversity Specialist for proposed development of high altitude training centre. Compile a Terrestrial Ecology Specialist Study, which forms part of the Environmental Impact Assessment process, which assess the impacts that the proposed Centre will have on the flora and fauna on site.
- Ecologist, Monitoring and data capturing of Elephants of the Red Volta: Earthwatch expedition
- Project Manager, Three selected areas around the Gorongosa National park, Sofala province, Mozambique
- Botanical impact assessment: Proposed Zoar Amalienstein Agricultural Development Feasibility Study, Western Cape.
- Biodiversity Specialist for proposed Graaff-Reinet FET college. Compile a Terrestrial Ecology Specialist Study, which forms part of the Environmental Impact Assessment process, which assess the impacts that the proposed college will have on the flora and fauna on site.
- Biodiversity Specialist for proposed Balfour FET college. Compile a Terrestrial Ecology Specialist Study, which forms part of the Environmental Impact Assessment process, which assess the impacts that the proposed college will have on the flora and fauna on site.
- Biodiversity Specialist for proposed Academic Hospital. Compile a Terrestrial Ecology Specialist Study, which forms part of the Environmental Impact Assessment process, which assess the impacts that the proposed hospital will have on the flora and fauna on site.

2. Acceptability of the terms of reference;

The Terms of Reference (ToR) is presented in Section 1.1.4 of the report. The ToR is considered to be comprehensive and allows for the generation of accurate data for informed decision-making to take place.

3. Is the methodology clearly explained and acceptable;

Section 1.1.5 of the report presents an Approach and detailed methodology. These are standard and scientifically sound and acceptable methods for assessing the terrestrial and aquatic ecology associated with the study area. It is the opinion of the specialist that the methodology employed during the assessment allowed for the generation of accurate data for informed decision-making to take place.

4. Evaluate the validity of the findings (review data evidence);

The surveys were conducted in different seasons from 2011 to 2018. The ideal period for the assessment of habitat within this region is following the onset of rains, which in this region, normally arises in the later summer months. The sampling and analysis of the site during the early summer season provided suitable data and results to present an informed decision on the local ecology. Other season surveys were also conducted. This aided in interpreting the data collected. In terms of quality, the report is considered to be comprehensive and the data of a detailed nature.

5. Discuss the suitability of the mitigation measures and recommendations;

Section 1.6 of the report presents detailed mitigation measures in each subsection relating to terrestrial, aquatic ecology, fauna and avifauna. It is the opinion of the specialist that the mitigation measures as presented in that report are sufficient to mitigate the anticipated impact of the proposed development on the receiving environment, and that these measures are integrated into the EMP for the pre-construction, construction, operational and maintenance phases of the development.

6. Identify any short comings and mitigation measures to address the short comings;

This report does not have any short comings. Section 1.6 of the report presents detailed mitigation measures in each subsection relating to terrestrial, aquatic ecology, fauna and avifauna. It is the opinion of the specialist that the mitigation measures as presented in that report are sufficient to mitigate the anticipated impact of the proposed development on the receiving environment, and that these measures are integrated into the EMP for the pre-construction, construction, operational and maintenance phases of the development

7. Evaluate the appropriateness of the reference literature;

Section 1.1.5.3 of the report describes the source of information used in this report. It is the opinion of the specialist that the literature employed during the assessment allowed for the generation of accurate data for informed decision-making to take place.

8. Indicate whether a site-inspection was carried out as part of the peer review;

No site visit was undertaken

9. Indicate whether the article is well-written and easy to understand.

Based on the findings of this review, even though no site visit was undertaken by the reviewer, it is the opinion of the independent reviewer that the information presented in this report is comprehensive, accurate and the results are reliable. The impact assessment is considered accurate and the mitigation measures, rehabilitation methods and general recommendations are considered relevant and necessary.

10. Assess the acceptability of the initial reports ToR

The Terms of Reference (ToR) is presented in Section 1.1.4 of the report. The ToR is considered to be comprehensive and allows for the generation of accurate data for informed decision-making to take place.

11. Assumptions and limitations

Section 1.1.5.2 of the report contains a list of assumptions and limitations which were applicable to the assessment. These assumptions and limitations are standard to ecological assessments and in no way detract from the scientific validity of the report.

12. Quality and Age of Data Used

The assessment was undertaken from 2011 to 2018 and as such, the data is current. In terms of quality, the report is considered to be comprehensive and the data of a detailed nature.

13. Method of assessment

Section 1.1.5 of the report presents an Approach and detailed methodology. These are standard and scientifically sound and acceptable methods for assessing the terrestrial and aquatic ecology associated with the study area. It is the opinion of the specialist that the methodology employed during the assessment allowed for the generation of accurate data for informed decision-making to take place.

14. Description of Current and Cumulative Impacts Associated with the Study Area:

The report describes possible current and future (including cumulative) impacts in considerable detail (Sections 1.5 and 1.6). The impacts and mitigation measures are deemed to be accurate and will allow for informed decision-making.

15. Sensitivity map of the area indicating areas of increased sensitivity and buffers to be avoided during development

Section 1.3.6 of the report describes the sensitivity of terrestrial ecological habitat unit relating to aquatic and riparian zones associated with the study area. It is the opinion of the specialist that the methodology employed during the assessment allowed for the generation of accurate data for informed decision-making to take place.

16. 9. Conditions and monitoring requirements to include within the EMPr

Sections 1.7 of the report present monitoring conditions and monitoring requirements for inclusion into the EMPr, specifically relating to issues such as alien and invasive floral control, which is often a significant risk in newly cleared/rehabilitated areas. It is the opinion of the specialist that the monitoring requirements as presented in that report are relevant to the project and are sufficient to monitor anticipated impacts.

17. Description of consultation processes undertaken

As indicated on Page 3 of the report, this section is included in the Environmental Impact Report (EIR) as part of the Comments and Response Report.

18. Opinion of the specialist whether the activities should be authorised

Sections 1.8 (Conclusion and Recommendations) provides an analysis of the preferred alternative and a reasoned opinion (including recommendations) on the ecological viability of the proposed development. This opinion is supported by the author of this report and all monitoring requirements and recommendations as presented in this report must be adhered to and implemented.

19. Conclusion

Based on the findings of this review, even though no site visit was undertaken by the reviewer, it is the opinion of the independent reviewer that the information presented in this report is comprehensive, accurate and the results are reliable. The impact assessment is considered accurate and the mitigation measures, rehabilitation methods and general recommendations are considered relevant and necessary. It is recommended that, from a terrestrial ecological perspective, the proposed activity be considered favourably, provided that the recommended mitigation measures for the identified impacts are adhered to.

If you require further information, please do not hesitate to contact the undersigned.

Yours Sincerely,  
**Nemai Consulting (PTY) Ltd**

Avhafarei Phamphe  
Senior Biodiversity Consultant  
SACNASP REG.NO: 400349/2