



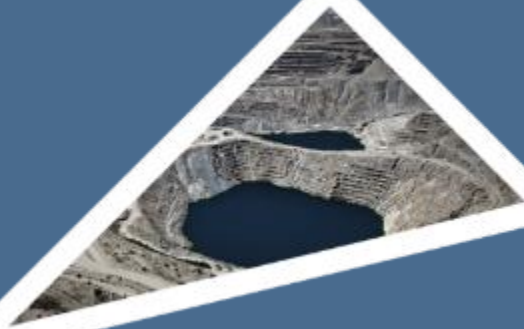
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EXTERNAL FINAL NEMA EA AND EMP_r AUDIT REPORT 2022

ENEL GREEN POWER – KARUSA SWITCHING STATION COMPLEX,
132KV DOUBLE CIRCUIT OVERHEAD POWERLINE AND ANCILLARIES

DEA REF: 14/12/16/3/3/1/1493





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Table of Contents

Executive Summary	iii
1 Introduction	1
1.1 Details of the Applicant	1
1.2 Brief Project Description	2
2 Details of the Auditor	2
2.1 Expertise of the Auditor	2
2.2 Declaration of Independence	3
3 Scope, Purpose and Objective of the Audit	3
3.1 Purpose and Scope of the Audit	3
3.2 Objectives of the Audit	3
4 Audit Methodology	4
4.1 Procedure for the Audit	4
4.2 Evaluation Criteria Used During the Audit	5
4.3 Consultation Process Undertaken	5
5 Results of the Assessment	6
5.1 Compliance Summary	6
5.1.1 Compliance with the EA	6
5.1.2 Compliance with the EMPr	7
5.2 Compliance Evaluation	7
5.2.1 Compliance Evaluation of The EA	8
5.2.2 Compliance Evaluation of The EMPr	16
5.3 Findings of the Audit	41
5.3.1 Findings from The Compliance Evaluation Of The EA And EMPr	41
5.4 Continued Adequacy of the EMPr	49
5.4.1 New Impacts Identified	49
5.4.2 Effectiveness of the EMPr	49
5.4.3 Shortcomings in the EMPr	49
6 Photographic Record	50
7 Conclusion	53
8 Assumptions, Limitations and Gaps in Knowledge	53



List of Figures

Figure 1: Summary of EA compliance statistics.....	6
Figure 2: Summary of EMPr compliance statistics.....	7
Figure 3: View of the Karusa substation.....	50
Figure 5: View of bare stream crossing along the Karusa overhead powerline.....	50
Figure 6: View of access road used along the 132kV powerline.....	51
Figure 7: View of an area previously sloped to achieve conductor ground clearance.....	51
Figure 8: View of the 132kV overhead powerline road crossing.....	52
Figure 8: View of the Karusa overhead powerline connection to the Eskom Komsberg substation.....	52

List of Tables

Table 1: Summary of findings of the EA and EMPr.....	iv
Table 2: Details of the applicant.....	1
Table 3: General Environmental Legislation.....	5
Table 4: Compliance Rating Protocol.....	5
Table 5: Compliance evaluation of EA conditions.....	8
Table 6: Compliance evaluation of EMPr conditions.....	16
Table 7: Table of findings of the audit.....	41



EXECUTIVE SUMMARY

ACED Renewables Hidden Valley (Pty) Ltd (Karusa Wind Farm) was granted an EA (DEA Ref. no: 14/12/16/3/3/1/1493) for the proposed construction of a switching station, 132kV double circuit overhead powerline and ancillaries for the authorised Karusa Wind Farm near Sutherland within the Karoo Hoogland Local Municipality of Namakwa District in Northern Cape. Karusa appointed Environmental Impact Management Services (Pty) Ltd (EIMS) to conduct an external final environmental (Post Rehabilitation) audit of the issued EA (DEA Ref. no: 14/12/16/3/3/1/1493) and approved Environmental Management Programme (EMPr), in compliance with conditions 22, 23, 24 and 25 of the EA as well as section 6.5.3 of the approved EMPr.

Additional to the EA and EMPr requirements, scheduled Environmental Compliance Audits are required to be undertaken in terms of Regulation 34 of the National Environmental Management Act, Act 107 of 1998 (NEMA) Environmental Impact Assessment (EIA) Regulations, 2014. Regulation 34 states:

- 1) *“The holder of an environmental authorisation must, for the period during which the environmental authorisation, EMPr, and the closure plan in the case of a closure activity, remain valid-*
 - (a) *Ensure that the compliance with the conditions of the environmental authorisation, the EMPr, and the closure plan in the case of a closure activity, is audited; and*
 - (b) *Submit an environmental audit report to the relevant competent authority.*
- 2) *The environmental audit report contemplated in sub-regulation (1) must-*
 - (a) *be prepared by an independent person with the relevant environmental auditing expertise;*
 - (b) *provide verifiable findings, in a structured and systematic manner, on*
 - i) *The level of performance against and compliance of an organisation or project with the provisions of the requisite environmental authorisation, EMPr and the closure plan in the case of a closure activity; and*
 - ii) *The ability of the measures contained in the EMPr and the closure plan to sufficiently provide for the avoidance, management and mitigation of environmental impacts associated with the undertaking of the activity;*
 - (c) *Contain the information set out in Appendix 7; and*
 - (d) *Be conducted and submitted to the competent authority at intervals as indicated in the environmental authorisation”.*

This Audit represents the Environmental Compliance Audit of the EA and EMPr for the year 2022 in line with the requirements of NEMA, the EA and the EMPr.

The scope of the audit is to assess compliance with the conditions of the EA and EMPr as well as to confirm the continued adequacy of the EMPr. The purpose of the audit is to ensure compliance with the requirements of the EA and EMPr. The objectives of the audit are to determine:

- The level of performance against, and compliance of the organisation or project with, the provisions of the EA and EMPr; and
- The ability of the measures contained in the EMPr, to sufficiently provide for the avoidance, management and mitigation of environmental impacts associated with the undertaking of the activity.

An audit checklist was prepared to evaluate the compliance with each condition contained in the EA and EMPr. Following the initial checklist preparation, a site visit was undertaken on the 29th of September 2022. The findings of this audit are based on visual inspection of certain rehabilitated areas, interviews, as well as documentation reviewed.



Compliance with the requirements of the EA and EMPr was evaluated using pre-determined scoring criteria as described in Section 4.2. The results of the evaluation are provided in Section 5.2 and the findings are described in Section 5.3. Each condition in the EA and EMPr was weighted equally in order to determine a compliance score. Utilising this scoring system, a compliance score of 86,96% was obtained for EA and 90,24% obtained for the EMPr during this audit. The key findings of the audit are provided in Table 1.

Table 1: Summary of findings of the EA and EMPr.

Finding #	EA / EMPr Ref #	Requirement Description	Findings and Recommendations
Environmental Authorization			
1	11	<p>The holder of the authorisation must publish a notice -</p> <p>11.1. informing interested and affected parties of the decision;</p> <p>11.2. informing interested and affected parties where the decision can be accessed; and</p> <p>11.3. drawing the attention of interested and affected parties to the fact that an appeal may be lodged against this decision in terms of the National Appeal Regulations, 2014.</p>	<p>Proof of publishing a notice informing interested and affected parties of the decision; where it can be accessed; and drawing the attention of I&APs to the fact that an appeal may be lodged against the EA decision in terms of the National Appeal Regulations, 2014 was not available at the time of the audit.</p>
2	36	<p>All areas disturbed must be rehabilitated and re-seeded with indigenous plants at the end of the construction phase.</p>	<p>The contractor reported that seeding was only undertaken in certain areas and not all disturbed areas as required by the EA. Poor regrowth was also noted in isolated areas. It is recommended that topsoil from areas that will not be reinstated be used for rehabilitation of these areas. If necessary, these areas must be re-seeded with indigenous plants as required by the EA.</p>
3	37	<p>All construction material, equipment and any other foreign objects brought into the area by contractors and staff must be removed immediately after construction.</p>	<p>The camp has not yet been cleared of all materials. It was reported that a private agreement was made with the farmer to store some containers and equipment during the construction period. It was reported that the lease agreement will be taken over by EGP in October 2022. No proof of such agreement was provided to the auditor. All construction materials (particularly wastes) that will not be handed over to the farmer must be removed from site. Should an agreement be reached with a farmer to leave certain materials (not waste), this</p>



Finding #	EA / EMPr Ref #	Requirement Description	Findings and Recommendations
			must be clearly documented, and a copy of the agreement be kept in the site file for audit purposes.
4	38	Any solid waste must be disposed of at a landfill licensed in terms of section 20 (b) of the National Environment Management Waste Act, 2008 (Act No.59 of 2008).	Waste was observed at the satellite camp, and it has to be disposed accordingly.
5	39	39. A copy of this environmental authorisation, the audit and compliance monitoring reports, and the approved EMPr, must be made available for inspection and copying 39.1. at the site of the authorised activity; 39.2. to anyone on request; and 39.3. where the holder of the environmental authorisation has a website, on such publicly accessible website.	Copies of all documents are available on site for inspection; however, these have not been made available on the EGP website as required by the EA. Copies of the EA/EMPr, audit and compliance monitoring reports must be made publicly available on the EGP website.
Environmental Management Programme (EMPr)			
1	5.1	Develop and implement a grievance mechanism for the construction, operational and decommissioning phases of the project for all employees, contractors, subcontractors and site personnel. This procedure should be in line with the South African Labour Law.	A grievance procedure was developed, and a complaints register was in place and used to track all official complaints received during the construction phase. However, the procedure did not address operational and decommissioning phases of the project. The procedure must give detail of how and by who future (operational and decommissioning phases) grievances will be dealt with.
2	6.2	Ensure waste containers are maintained and emptied on a regular basis	There is some waste that remains at the satellite camp. Waste must be removed for proper disposal at a suitably registered site.
3	6.2	Disturbed areas must be re-vegetated as soon as practicable in line with the progression of construction activities	Some disturbed areas have not been re-vegetated as yet. Furthermore, some disturbed areas have not yet been reinstated. All disturbed areas must be reinstated and re-vegetated at the requirements of the EA.
4	7.1	All temporary facilities, equipment, materials (including spoil material) removed from site	Not all materials had been removed from site at the time of the audit. Some materials still remained at the contractor's main and satellite camps. It was reported that the landowner requested the camp to



Finding #	EA / EMPr Ref #	Requirement Description	Findings and Recommendations
			be left unrehabilitated, however, an agreement in writing to this effect was not yet available. It was further reported that the lease agreement for the satellite camp would be taken over by EGP.
		All temporary fencing and danger tape must be removed once the construction phase has been completed	The fence at the main camp was still in place at the time of the audit and no written agreement to leave this in place was available at the time of the audit.
5	7.1	All hardened surfaces within the construction equipment camp area, not forming part of permanent laydown areas, should be ripped, all imported materials removed, and the area shall be top soiled and re-vegetated	The construction camp area had not been rehabilitated at the time of the audit. It was reported that the landowner requested that this area be left as is, however, no recorded agreement to this effect was available.
6	7.1	Rehabilitation must be in line with the requirements of the landowner for the land use (except in those areas of remaining natural vegetation which are disturbed)	Rehabilitation of the powerline route is in line with the adjacent natural vegetation. The main and satellite camps were not rehabilitated at the time of the audit.

Based on the audit, no shortcomings were noted regarding the adequacy and effectiveness of the EMPr to manage and mitigate the impacts of this project.



1 INTRODUCTION

ACED Renewables Hidden Valley (Pty) Ltd (Karusa Wind Farm) was granted an EA (DEA Ref. no: 14/12/16/3/3/1/1493) for the proposed construction of a switching station, 132kV double circuit overhead powerline and ancillaries for the authorised Karusa Wind Farm near Sutherland within the Karoo Hoogland Local Municipality of Namakwa District in Northern Cape. Karusa appointed Environmental Impact Management Services (Pty) Ltd (EIMS) to conduct an external environmental audit of the issued EA (DEA Ref. no: 14/12/16/3/3/1/1493) and approved Environmental Management Programme (EMPr), in compliance with conditions 22, 23, 24 and 25 of the EA as well as section 6.5.3 of the approved EMPr.

Additional to the EA and EMPr requirements, scheduled Environmental Compliance Audits are required to be undertaken in terms of Regulation 34 of the National Environmental Management Act, Act 107 of 1998 (NEMA) Environmental Impact Assessment (EIA) Regulations, 2014. Regulation 34 states:

- 1) *“The holder of an environmental authorisation must, for the period during which the environmental authorisation, EMPr, and the closure plan in the case of a closure activity, remain valid-*
 - (c) *Ensure that the compliance with the conditions of the environmental authorisation, the EMPr, and the closure plan in the case of a closure activity, is audited; and*
 - (d) *Submit an environmental audit report to the relevant competent authority.*
- 2) *The environmental audit report contemplated in sub-regulation (1) must-*
 - (e) *be prepared by an independent person with the relevant environmental auditing expertise;*
 - (f) *provide verifiable findings, in a structured and systematic manner, on*
 - i) *The level of performance against and compliance of an organisation or project with the provisions of the requisite environmental authorisation, EMPr and the closure plan in the case of a closure activity; and*
 - ii) *The ability of the measures contained in the EMPr and the closure plan to sufficiently provide for the avoidance, management and mitigation of environmental impacts associated with the undertaking of the activity;*
 - (g) *Contain the information set out in Appendix 7; and*
 - (h) *Be conducted and submitted to the competent authority at intervals as indicated in the environmental authorisation”.*

This Audit represents the Environmental Compliance Audit of the EA and EMPr for the year 2022 in line with the requirements of NEMA, the EA and EMPr.

1.1 DETAILS OF THE APPLICANT

Details of the Applicant are summarised in Table 2 below.

Table 2: Details of the applicant

Company	ACED Renewables Hidden Valley (Pty) Ltd
Postal address	ACED Renewables Hidden Valley (Pty) Ltd (Karusa Wind Farm),
	P O Box 651286, Benmore
	2010
Operations physical address	ACED Renewables Hidden Valley (Pty) Ltd,



	Sutherland, 6920
Head Office Telephone number	+27 10 344 0220
Head Office Fax Number	N/A

1.2 BRIEF PROJECT DESCRIPTION

Karusa Wind farm site is located within the Karoo Hoogland Local Municipality (approximately 30 km south of Sutherland in the Northern Cape Province). The facility will be powered by wind, no other fuels will be used to generate energy during the operational phase of the project. The Karusa Wind Farm is proposed on the following farm portions:

- Farm De Hoop 202.
- Fram Standvastigheid.
- Portions 1, 3 and the remainder of Farm Rheeboeke Fontein 209.

The project will include the following infrastructure:

- 35 wind turbines appropriately spaced to make use of the wind resource on the site. The facility would be operated as a single facility with each turbine being capable of producing 4.2MW.
- Each wind turbine will consist of a Tubular Steel foundation (approximately 50m x 60m - circular base of approximately 25m diameter), a steel tower, a hub (82m above ground level) and three blades with a rotor diameter of 136m.
- Permanent laydown/ hardstand areas (approximately 50m x 60m).
- Temporary infrastructure, including a site camp, laydown areas and a batching plant.
- Cabling (medium voltage) between wind turbines and other relevant components, laid approximately 1 m underground where underground cabling is feasible. In as far as possible, cabling will follow the internal access roads.
- High and Medium Voltage (MV) Overhead power line(s).
- Internal roads (approximately 8 m in width) linking the wind turbines and other infrastructure on the site. Existing farm roads will be used as far as possible. However, the dispersed distribution pattern of wind turbines and the vast areas of the site which are not currently accessible will necessitate the construction of ~30 km of new access roads.
- Operations, and services workshop area / office building for control, maintenance and storage (approximately 2000m²).
- Guard house for access security of 50m².

2 DETAILS OF THE AUDITOR

The audit was undertaken by Mr Sikhumbuzo Mahlangu from EIMS and the details of the auditor are described below.

2.1 EXPERTISE OF THE AUDITOR

Sikhumbuzo holds a BSc. Master's degree in Zoology (Aquatic Health) from the University of Johannesburg. He is an aquatic and research scientist with over 2 years' experience, and over 10 years' experience as an environmental scientist. He has also completed an advanced course on Tools for Wetland Assessments. His expertise lies mainly in environmental management, auditing, monitoring, surface and ground water quality assessments, biomonitoring, wetland assessments and reporting.

Sikhumbuzo has played a vital role in providing advice on general environmental management issues on site to projects such as Transnet New Multi Product Pipeline (NMPP), Mokolo Crocodile Water Augmentation Project Phase 1 (MCWAP1), Eskom Grootvlei Power Station and Eskom Kusile Power Station Construction Project among others. He has also been involved on numerous projects in the energy, mining and infrastructure development



sectors as well as management and preparation of documentation required for Integrated Water Use Licence Applications (IWULA). He has also played a role in assisting and advising various contractors on the practical implementation of Water Use Licences, Environmental Management Plans and conditions of Environmental Authorisations.

2.2 DECLARATION OF INDEPENDENCE

I, Sikhumbuzo Mahlangu declare that –

- *I act as the independent environmental auditor;*
- *I will perform the work relating to the audit in an objective manner, even if this results in views and findings that are not favourable to the Client;*
- *I declare that there are no circumstances that may compromise my objectivity in performing such work;*
- *I have expertise in conducting environmental audits, including knowledge of the environmental Acts, regulations and any guidelines that have relevance to the audited operations;*
- *I will comply with the relevant Acts, regulations and all other applicable legislation;*
- *I have no, and will not engage in, conflicting interests in the audit process;*
- *I realise that a false declaration is an offence in terms of regulation 48 and is punishable in terms of section 24F of the NEMA.*

I do not have and will not have any vested interest (either business, financial, personal or other) in the audit other than remuneration for work performed.

3 SCOPE, PURPOSE AND OBJECTIVE OF THE AUDIT

3.1 PURPOSE AND SCOPE OF THE AUDIT

The purpose of the audit is to ensure compliance with the requirement of the EA and EMPr as well as the NEMA EIA Regulation 34 to undertake scheduled compliance audits of the EA and EMPr.

The environmental audit seeks to cover the following scope of work or part thereof:

- The extent of EA / EMPr compliance;
- The consistency of site activities with activities provided for in the EA and EMPr;
- The accuracy and effectiveness of data reporting processes to ensure the integrity of the reported data;
- The effectiveness of incident identification, classification, recording, reporting and management including follow-up processes; and
- To identify opportunities for improvement and make recommendations.

3.2 OBJECTIVES OF THE AUDIT

In terms of Regulation 34 of the 2014 EIA Regulations (Government Notice R. 982), objectives of the environmental audit report are;

- Report on:
 - The level of compliance with the conditions of the environmental authorisation and the EMPr; and
 - The extent to which the avoidance, management and mitigation measures provided for in the EMPr achieve the objectives and outcomes of the EMPr.
- Identify and assess any new impacts and risks as a result of undertaking the activity;



- Evaluate the effectiveness of the EMPr;
- Identify shortcomings in the EMPr;
- Identify the need for any changes to the avoidance, management and mitigation measures provided for in the EMPr.

4 AUDIT METHODOLOGY

4.1 PROCEDURE FOR THE AUDIT

Initial documentation was obtained and reviewed in preparation for the audit. A checklist was prepared based on the requirements of the EA and EMPr. Following the initial checklist preparation and documentation review, a site visit was undertaken on 29th of September 2022 to determine compliance with the EA and EMPr. Compliance with the requirements of the EA and EMPr was evaluated using the pre-determined scoring criteria as described in Section 4.2. The results of the evaluation are provided in Section 5.2 and the findings are described in Section 5.3 of this report.

The report provides recommendations for improvement based on general findings and site observations. Findings from the audit and site inspection that did not relate to a particular EA and EMPr condition did not contribute to the audit score. However, where deficiencies have been identified that do not necessarily correspond to EMPr conditions, these findings have been used to provide recommendations for improvement.

Various documentation and records were required during the audit to confirm compliance with the EA and EMPr conditions. Where possible, documentation and records were made available electronically for review prior to the site visit. The rest of the information required for verification of compliance was provided following the site inspection. No physical testing or chemical analysis was performed during the assessment and information provided by employees was verified by inspection only.

There is wide variety of South African environmental legislation, and the Karusa Wind farm is required to comply with all relevant legislation in their operations. For the purposes of this report, some of the main environmental legislation applicable to the Karusa Wind farm, and considered during the audit, has been listed in Table 3 below.



Table 3: General Environmental Legislation.

Title of legislation, policy or guideline:	Administering authority:
National Water Act (Act No. 36 of 1998)	Department of Water and Sanitation
National Environmental Management Act (Act No. 107 of 1998) - and associated Regulations	National Department of Environment, Forestry and Fisheries

Whilst consideration was given to the legislation listed in the table above, a full comprehensive legal compliance audit is beyond the scope of this audit. Where reference is made to legislation or other statutory provisions in this report, the original legislation or other statutory provisions will always take precedence and the reader is directed to revert to the original legislation or statutes.

4.2 EVALUATION CRITERIA USED DURING THE AUDIT

The scoring criteria used during the audit are as follows:

Table 4: Compliance Rating Protocol.

Compliance Rating	Score	Description
Full-Compliance	4	Indicating that the condition was fully complied with
Partial-Compliance	2	Indicating that the condition has not been fully complied with and that additional measures are required to obtain full compliance.
Non-Compliance	0	Indicating that the condition has not been complied with.
Not Applicable	N/A	Indicating that the condition is not currently applicable. Not applicable conditions were removed from the total number of conditions from which the compliance score was calculated.
Not Verified	-	Indicating that the condition was not verified for various reasons. Non-verifiable conditions were removed from the total number of conditions from which the compliance score was calculated.

Certain conditions have been included in the EA and EMPr for information purposes and are either not possible, or within the scope of this audit, to verify compliance with these conditions. These conditions do not contribute to the audit scoring and as such have been marked as not-applicable (N/A). It is important however to note that despite certain conditions not being scored in the audit checklist, these conditions remain binding on the applicant and must be implemented and complied with by Karusa Wind farm as and when relevant to ensure compliance.

According to the scoring criteria, findings have been given a straight compliance score and a weighted compliance score. The straight compliance score is calculated based on the compliance with the relevant conditions (i.e. yes or no). The weighted compliance score is calculated by using the compliance rating protocol (0, 2, 4) and scoring the individual conditions and calculating the percentage compliance.

4.3 CONSULTATION PROCESS UNDERTAKEN

The findings of this audit are based on visual inspection of the rehabilitated areas, interviews, as well as documentation reviewed. No physical testing or chemical analysis was performed during the assessment and information provided by employees was verified by inspection and review only. The personnel that was interviewed and assisted with the audit includes, inter alia:



- Pamela Mabece (Environmental Officer – Enel Green Power);
- Irvan Maphanga (Site Manager – Enel Green Power); and
- Cicil Hoffman (WBHO).

5 RESULTS OF THE ASSESSMENT

5.1 COMPLIANCE SUMMARY

5.1.1 COMPLIANCE WITH THE EA

A total of 38 conditions of the EA were identified and evaluated. 15 of these conditions were considered not applicable to the current phase of the project and 23 were deemed applicable. Of the applicable conditions a total of 18 conditions were noted to be fully compliant, 4 partially compliant and 1 condition was non-compliant. The level of compliance for each condition was calculated according to the methodology described in section 4.2. Utilising this scoring system, a total weighted compliance score of 86,96% was obtained for this audit. A summary of compliance is presented in Figure 1, below.

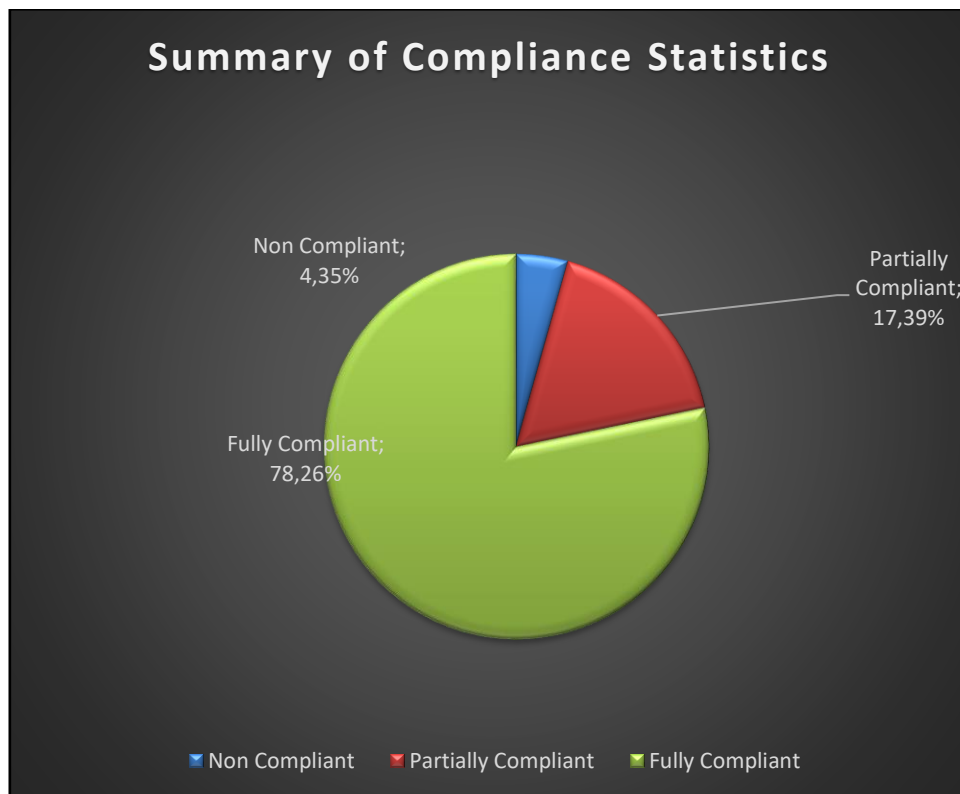


Figure 1: Summary of EA compliance statistics.



5.1.2 COMPLIANCE WITH THE EMPr

A total of 208 commitments of the EMPr were identified and evaluated. 167 of these commitments were considered not applicable to the current phase of the project and 41 were deemed applicable. Of the applicable commitments a total of 34 commitments were noted to be fully compliant, 6 partially compliant and 1 was non-compliant. The level of compliance for each commitment was calculated according to the methodology described in section 4.2. Utilising this scoring system, a total weighted compliance score of 90,20% was obtained for this audit. A summary of compliance is presented in Figure 2 below.

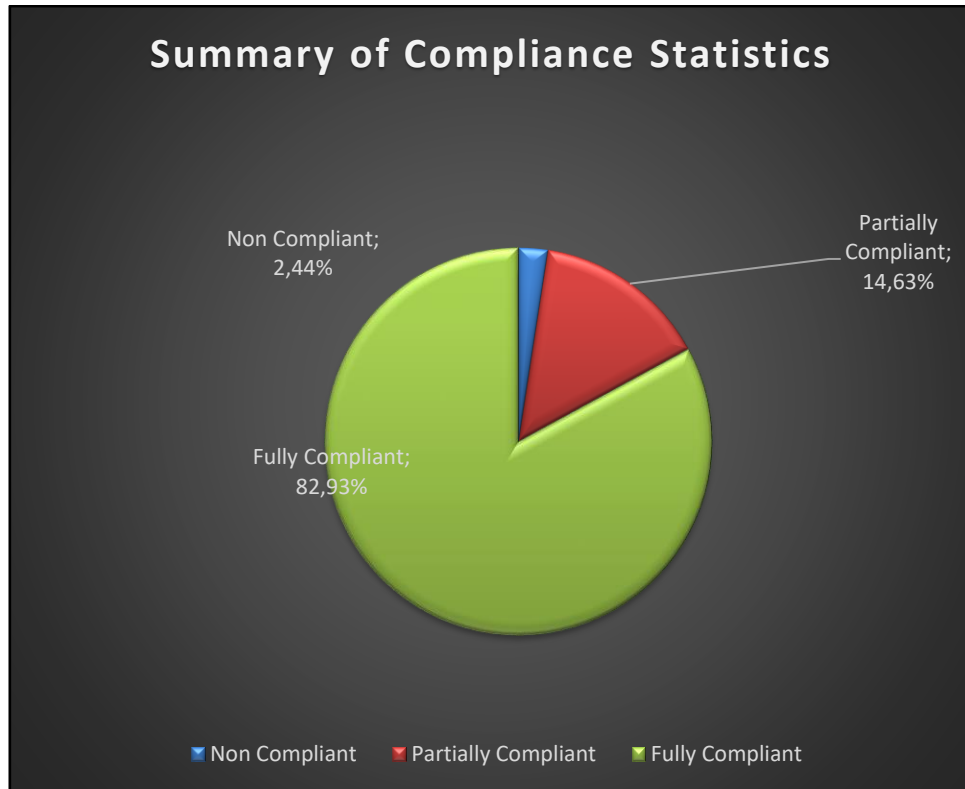


Figure 2: Summary of EMPr compliance statistics

5.2 COMPLIANCE EVALUATION

Sections below present findings from the EA and EMPr compliance evaluation.



5.2.1 COMPLIANCE EVALUATION OF THE EA

A total of 40 conditions were assessed according to the assessment methodology as described in section 4.2 and the findings of the audit are presented in Table 5 below

Table 5: Compliance evaluation of EA conditions

Ref #	Condition	Compliance Y/N	Compliance Rating	Comments/ Verification
Scope of Authorisation				
1.	The preferred Site Alternative 1, for the proposed construction of a switching station, 132 kV double circuit overhead powerline and ancillaries for the authorised Karusa wind farm near Sutherland within Karoo Hoogland Local Municipality of Namakwa District in Northern Cape, with the above coordinates is approved.	N/A	N/A	Information item, the condition was noted by the Applicant.
2.	Authorisation of the activity is subject to the conditions contained in this environmental authorisation, which form part of the environmental authorisation and are binding on the holder of the authorisation.	N/A	N/A	Information item, the condition was noted by the Applicant.
3.	The holder of the authorisation is responsible for ensuring compliance with the conditions contained in this environmental authorisation. This includes any person acting on the holder's behalf, including but not limited to, an agent, servant, contractor, sub-contractor, employee, consultant or person rendering a service to the holder of the authorisation.	N/A	N/A	Information item, the condition was noted by the Applicant.
4.	The activities authorised may only be carried out at the property as described above.	Y	4	All construction infrastructure and activities are located within the properties as described in the EA.
5.	Any changes to, or deviations from, the project description set out in this environmental authorisation must be approved, in writing, by the Department before such changes or deviations may be effected. In assessing whether to grant such approval or not, the Department may request such information as it deems necessary to evaluate the significance and impacts of such changes or deviations and it may be necessary for the holder of the authorisation to apply for further environmental authorisation in terms of the regulations.	N/A	N/A	No changes to, or deviations from, the project description set out in this environmental authorisation were noted and/or reported to the auditor during the audit.



Ref #	Condition	Compliance Y/N	Compliance Rating	Comments/ Verification
6.	The holder of an environmental authorisation must apply for an amendment of the environmental authorisation with the competent authority for any alienation, transfer or change of ownership rights in the property on which the activity is to take place.	N/A	N/A	No alienation, transfer or change of ownership rights in the property have taken place on the approved properties.
7.	This activity must commence within a period of five (05) years from the date of issue of this environmental authorisation. If commencement of the activity does not occur within that period, the authorisation lapses and a new application for environmental authorisation must be made in order for the activity to be undertaken.	Y	4	The EA was issued on the 03/05/2016 and the activity commenced in the year 2020.
8.	Commencement with one activity listed in terms of this environmental authorisation constitutes commencement of all authorised activities.	N/A	N/A	Information item, the condition was noted by the Applicant.
Notification of authorisation and right to appeal				
9.	The holder of the authorisation must notify every registered interested and affected party, in writing and within 14 (fourteen) calendar days of the date of this environmental authorisation, of the decision to authorise the activity.	Y	4	Proof of notification of every registered interested and affected party, in writing and within 14 (fourteen) calendar days of the date of the environmental authorisation, of the decision to authorise the activity was available at the time of the audit.
10.1-10.4.	10. The notification referred to must — 10.1. specify the date on which the authorisation was issued; 10.2. inform the interested and affected party of the appeal procedure provided for in the National Appeal Regulations, 2014; 10.3. advise the interested and affected party that a copy of the authorisation will be furnished on request; and 10.4. give the reasons of the competent authority for the decision.	Y	4	Proof of notification of every registered interested and affected party, in writing and within 14 (fourteen) calendar days of the date of the environmental authorisation, of the decision to authorise the activity was available at the time of the audit.
10.1.	The holder of the authorisation must publish a notice - 11.1. informing interested and affected parties of the decision;	N	0	Proof of publishing a notice informing interested and affected parties of the decision; where it can be accessed; and drawing the attention of I&APs to the fact that an



Ref #	Condition	Compliance Y/N	Compliance Rating	Comments/ Verification
	11.2. informing interested and affected parties where the decision can be accessed; and 11.3. drawing the attention of interested and affected parties to the fact that an appeal may be lodged against this decision in terms of the National Appeal Regulations, 2014.			appeal may be lodged against the EA decision in terms of the National Appeal Regulations, 2014 was not available at the time of the audit.
Commencement of the activity				
12.	The authorised activity shall not commence within twenty (20) days of the date of signature of the authorisation.	Y	4	The authorised activity did not start until 2020 when WBHO was appointed for the construction of the powerline.
13.	In terms of section 43(7), an appeal under section 43 of the National Environmental Management Act, 1998 will suspend the environmental authorisation or any provision or condition attached thereto. In the instance where an appeal is lodged you may not commence with the activity/ies until such time that the appeal has been finalised.	Y	4	Information item, the condition was noted by the Applicant. No appeals had been lodged at the time of commencement.
Management of the activity				
14.	The Environmental Management Programme (EMPr) dated January 2016, submitted as part of the Application for EA is hereby approved. This EMPr must be implemented and adhered to.	N/A	N/A	Information item, the condition was noted by the Applicant. Environmental management of all activities were monitored and audited against the approved EMPr.
Frequency and process of updating the EMPr				
15.	The EMPr must be updated where the findings of the environmental audit reports, contemplated in Condition 23 below, indicate insufficient mitigation of environmental impacts associated with the undertaking of the activity, or insufficient levels of compliance with the environmental authorisation or EMPr.	N/A	N/A	The independent ECO audit reports did not indicate insufficient mitigation of environmental impacts associated with the undertaking of the activity, or insufficient levels of compliance with the environmental authorisation or EMPr. As such, no EMPr updates were necessary.
16	The updated EMPr must contain recommendations to rectify the shortcomings identified in the environmental audit report.	N/A	N/A	The independent ECO audit reports did not indicate insufficient mitigation of environmental impacts associated with the undertaking of the activity, or insufficient levels of compliance with the environmental authorisation or EMPr. As such, no EMPr updates were necessary.



Ref #	Condition	Compliance Y/N	Compliance Rating	Comments/ Verification
17.	The updated EMPr must be submitted to the Department for approval together with the environmental audit report, as per Regulation 34 of GN R. 982. The updated EMPr must be subjected to a public participation process, which process has been agreed to by the Department, prior to submission of the updated EMPr to the Department for approval.	N/A	N/A	The independent ECO audit reports did not indicate insufficient mitigation of environmental impacts associated with the undertaking of the activity, or insufficient levels of compliance with the environmental authorisation or EMPr. As such, no EMPr updates were necessary.
18.	In assessing whether to grant approval of an EMPr which has been updated as a result of an audit, the Department will consider the processes prescribed in Regulation 35 of GN R.982. Prior to approving an amended EMPr, the Department may request such amendments to the EMPr as it deems appropriate to ensure that the EMPr sufficiently provides for avoidance, management and mitigation of environmental impacts associated with the undertaking of the activity.	N/A	N/A	Information item, the condition was noted by the Applicant.
19.	The holder of the authorisation may apply for an amendment of an EMPr, if such amendment is required before an audit is required. The holder must notify the Department of its intention to amend the EMPr at least 60 days prior to submitting such amendments to the EMPr to the Department for approval. In assessing whether to grant such approval or not, the Department will consider the processes and requirements prescribed in Regulation 37 of GN R. 982.	N/A	N/A	Information item, the condition was noted by the Applicant.
Monitoring				
20.	"The holder of the authorisation must appoint an experienced independent Environmental Control Officer (ECO) for the construction phase of the development that will have the responsibility to ensure that the mitigation/rehabilitation measures and recommendations referred to in this environmental authorisation are implemented and to ensure compliance with the provisions of the approved EMPr.	Y	4	Zintle Fono from EIMS (Pty) Ltd. was appointed as the ECO for the Karusa Wind Farm project. Ms Fono is an experienced ECO and was appointed before commencement of authorised activities. The name and contact details of the ECO were submitted to the Director: Compliance Monitoring of the Department. Detailed reports were produced by the ECO with record of all activities, problems identified, transgressions noted on site. The ECO remained employed until all rehabilitation measures, as required for implementation due to



Ref #	Condition	Compliance Y/N	Compliance Rating	Comments/ Verification
				construction damage, were completed and the site was ready for operation.
Recording and reporting to the Department				
21.	All documentation e.g. audit/monitoring/compliance reports and notifications, required to be submitted to the Department in terms of this environmental authorisation, must be submitted to the Director: Compliance Monitoring of the Department.	Y	4	Monthly ECO audit reports and the external NEMA audit report were submitted to the Director: Compliance Monitoring of the Department.
22.	The holder of the environmental authorisation must, for the period during which the environmental authorisation and EMPr remain valid, ensure that project compliance with the conditions of the environmental authorisation and the EMPr are audited, and that the audit reports are submitted to the Director: Compliance Monitoring of the Department.	Y	4	The project compliance with the conditions of the environmental authorisation and the EMPr were audited by the ECO on a monthly basis and reports were submitted to the Director: Compliance Monitoring of the Department.
23.	The frequency of auditing and of submission of the environmental audit reports must be as per the frequency indicated in the EMPr, taking into account the processes for such auditing as prescribed in Regulation 34 of GN R. 982.	Y	4	Monthly audits were undertaken by the ECO and reports were submitted to the Department.
24.	The holder of the authorisation must, in addition, submit an environmental audit reports to the Department within 30 days of completion of the construction phase (i.e. within 30 days of site handover) and a final environmental audit report within 30 days of completion of rehabilitation activities.	Y	4	Environmental audit reports were submitted to the department within 30 days of completion of the construction phase and a final environmental audit was undertaken on 29 September 2022. It must, however, be noted that rehabilitation had not been undertaken at the camps and no written confirmation of the proposed future use of these areas was available at the time of the audit.
25.	The environmental audit reports must be compiled in accordance with appendix 7 of the EIA Regulations, 2014 and must indicate the date of the audit, the name of the auditor and the outcome of the audit in terms of compliance with the environmental authorisation conditions as well as the requirements of the approved EMPr.	Y	4	The environmental audit reports were compiled in accordance with appendix 7 of the EIA Regulations, 2014.
26.	Records relating to monitoring and auditing must be kept on site and made available for inspection to any relevant and competent authority in respect of this development.	Y	4	Audit reports were available on site for inspection.



Ref #	Condition	Compliance Y/N	Compliance Rating	Comments/ Verification
Notification to Authorities				
27.	A written notification of commencement must be given to the Department no later than fourteen (14) days prior to the commencement of the activity. Commencement for the purposes of this condition includes site preparation. The notice must include a date on which it is anticipated that the activity will commence, as well as a reference number.	Y	4	Written notification of construction commencement was given to the Department on 25 September 2019. It was indicated that construction was expected to start on 9 October 2019.
Operation of the Activity				
28.	A written notification of operation must be given to the Department no later than fourteen (14) days prior to the commencement of the activity operational phase.	Y	4	Written notification of operational phase commencement was sent to the Department on 30 June 2022.
Site closure and decommissioning				
29.	Should the activity ever cease or become redundant, the holder of the authorisation must undertake the required actions as prescribed by legislation at the time and comply with all relevant legal requirements administered by any relevant and competent authority at that time.	N/A	N/A	Information item, the condition was noted by the Applicant.
Specific conditions				
30	The powerline construction servitude must be clearly demarcated and aligned to avoid protected trees should they occur within the route alignment.	N/A	N/A	This is a pre-construction condition and is no longer applicable during this phase of the development. Furthermore, no protected trees were encountered on site.
31	Species of conservation concern must be transplanted to similar habitat outside the development footprint under the supervision of an ecologist or plant translocation specialist. Permits from the Northern Cape Department of Environmental Affairs and Nature Conservation (DEANC) as well as Department of Agriculture Forestry and Fisheries (DAFF) must be obtained prior relocation.	Y	4	ECO reports indicated that species of conservation concern were transplanted outside of the development footprint under the supervision of an ecologist.
32	The siting of the construction equipment camp must take cognisance of any sensitive areas reflected on the sensitive map.	Y	4	A previously disturbed and highly modified area was used for the construction camp.



Ref #	Condition	Compliance Y/N	Compliance Rating	Comments/ Verification
33	If concentrations of historical and pre-colonial archaeological heritage material and/or human remains (including graves and burials) are uncovered during construction, all work in the immediate area affecting the findings must cease immediately and be reported to the South African Heritage Resources Agency (SAHRA) and an archaeologist must be appointed at the cost of the Proponent so that systematic and professional investigation/excavation can be undertaken.	Y	4	It was reported that a suspected grave was identified during construction. Work was stopped within the vicinity of the finding and a heritage specialist was called in to investigate and report to SAHRA with the findings. Ultimately, the finding was fenced off and demarcated.
34	All areas disturbed must be rehabilitated and re-seeded with indigenous plants at the end of the construction phase.	N	2	The contractor reported that seeding was only undertaken in certain areas and not all disturbed areas as required by the EA. Poor regrowth was also noted in isolated areas.
35	All construction material, equipment and any other foreign objects brought into the area by contractors and staff must be removed immediately after construction.	N	2	The camp has not yet been cleared of all materials. It was reported that a private agreement was made with the farmer to store some containers and equipment during the construction period. It was reported that the lease agreement will be taken over by EGP in October 2022. No proof of such agreement was provided to the auditor.
36	"Any solid waste must be disposed of at a landfill licensed in terms of section 20 (b) of the	N	2	Waste was observed at the satellite camp, and it has to be disposed accordingly.
General				
37.1-37.3	37. A copy of this environmental authorisation, the audit and compliance monitoring reports, and the approved EMPr, must be made available for inspection and copying 37.1. at the site of the authorised activity; 37.2. to anyone on request; and 37.3. where the holder of the environmental authorisation has a website, on such publicly accessible website.	N	2	Copies of all documents are available on site for inspection; however, these have not been made available on the EGP website as required by the EA.
38.	National government, provincial government, local authorities or committees appointed in terms of the conditions of this authorisation or any other public authority shall not be held responsible for any damages or losses suffered by the holder of the authorisation or his/her successor in title in any instance where construction or operation subsequent to construction be	N/A	N/A	Information item, the condition was noted by the Applicant.



Ref #	Condition	Compliance Y/N	Compliance Rating	Comments/ Verification
	temporarily or permanently stopped for reasons of non-compliance by the holder of the authorisation with the conditions of authorisation as set out in this document or any other subsequent document emanating from these conditions of authorisation.			



5.2.2 COMPLIANCE EVALUATION OF THE EMPr

A total of 209 commitments were assessed according to the assessment methodology as described in section 4.2 and the findings of the audit are presented in Table 6 below

Table 6: Compliance evaluation of EMPr conditions

Ref #	Condition	Compliance Y/N	Compliance Rating	Comments/ Verification
5.1	"MANAGEMENT PROGRAMME: PRE-CONSTRUCTION and opportunities" CHAPTER 5-Objective 1: Ensure the design responds to identified environmental constraints			
	Plan and conduct pre-construction activities in an environmentally acceptable manner.	N/A	N/A	This condition is no longer applicable at this stage of the project.
	Obtain any additional environmental permits required (biodiversity permits, etc.) based on final positioning of infrastructure.	N/A	N/A	Biodiversity flora permit for Karusa wind farm (reference number: 0053/2020) was renewed it is valid up until 31 October 2022. However, this condition is no longer applicable at the current stage.
	A rehabilitation plan that specifies the rehabilitation process should be compiled.	Y	4	A rehabilitation plan was developed by an Ecologist.
	Any new access roads are required to be carefully planned and constructed to minimise the impacted area and prevent unnecessary excavation, placement, and compaction of soil. Construction vehicles also need to consider the load carrying capacity of road surfaces and adhere to all other prescriptive regulations regarding the use of public roads by construction vehicles.	N/A	N/A	Condition is no longer applicable at this stage of the project.
	Compile an appropriate storm water management plan.	Y	4	A stormwater management plan was compiled.
	The terms of this EMPr and the Environmental Authorisation must be included in all tender documentation and Contractor/sub-contractor contracts.	N/A	N/A	Condition is no longer applicable at this stage of the project.
	The terms of this EMPr and the Environmental Authorisation must be included in all tender documentation and Contractor/sub-contractor contracts.	N/A	N/A	Condition is no longer applicable at this stage of the project.



Ref #	Condition	Compliance Y/N	Compliance Rating	Comments/ Verification
	Tender documentation should contain guidelines for the involvement of labour, entrepreneurs, businesses, and Small, Medium and Micro Enterprises (SMMEs) from the local sector	N/A	N/A	Condition is no longer applicable at this stage of the project.
	Objective 2: To ensure effective communication mechanisms			
	Implement a grievance mechanism procedure for the public (Appendix A)	Y	4	A grievance procedure was developed. A complaints register was in place and used to track all official complaints received.
	Develop and implement a grievance mechanism for the construction, operational and decommissioning phases of the project for all employees, contractors, subcontractors and site personnel. This procedure should be in line with the South African Labour Law.	N	2	A grievance procedure was developed, and a complaints register was in place and used to track all official complaints received during the construction phase. However, the procedure did not address operational and decommissioning phases of the project
6.1	MANAGEMENT PROGRAMME: CONSTRUCTION-CHAPTER 6-OBJECTIVE 1: Establish clear reporting, communication, and responsibilities in relation to overall implementation of the EMPr			
	Formal responsibilities are necessary to ensure that key procedures are executed. Specific responsibilities of the Project Manager; Site Manager; Environmental Officer (EO)/ Environmental Representative; Environmental Control Officer (ECO) and Contractor for the construction phase of this project are as detailed below. Roles and responsibilities should be confirmed and updated throughout the construction phase in order to ensure effective environmental management and communication between parties.	N/A	N/A	Condition is no longer applicable at this stage of the project.
6.2	OBJECTIVE 2: Minimise impacts related to inappropriate site establishment			
	Secure site, working areas and excavations in an appropriate manner, as agreed with the Site Manager and EO.	N/A	N/A	Condition is no longer applicable at this stage of the project.
	Fence and secure contractor's equipment camp/ laydown area	N/A	N/A	Condition is no longer applicable at this stage of the project.



Ref #	Condition	Compliance Y/N	Compliance Rating	Comments/ Verification
	Where the public could be exposed to danger by any of the works or site activities, the contractor must, as appropriate, provide suitable flagmen, barriers and/or warning signs in English, Afrikaans and any other relevant local languages, all to the approval of the Site Manager	N/A	N/A	Condition is no longer applicable at this stage of the project.
	All unattended open excavations shall be adequately demarcated and/or fenced. Adequate protective measures must be implemented to prevent unauthorised access to the working area and the internal access/haul routes.	N/A	N/A	Condition is no longer applicable at this stage of the project.
	"Establish appropriately bunded areas for storage of hazardous materials (i.e. fuel/chemicals to be required during construction)"	N/A	N/A	Condition is no longer applicable at this stage of the project.
	All development footprints should be appropriately fenced off and clearly demarcated	N/A	N/A	Condition is no longer applicable at this stage of the project.
	Establish the necessary ablution facilities with chemical toilets and provide adequate sanitation facilities and ablutions for construction workers (1 toilet per every 15 workers) at appropriate walking distance. Provide sanitary bins for female workers	N/A	N/A	Condition is no longer applicable at this stage of the project.
	Ablution or sanitation facilities should not be located within 100 m from a 1:100 year flood line including drainage lines or within 32m of a watercourse, whichever is greatest.	N/A	N/A	Condition is no longer applicable at this stage of the project.
	Supply adequate (closable, tamper proof) waste collection bins at site where construction is being undertaken	N/A	N/A	Condition is no longer applicable at this stage of the project.
	Separate bins should be provided for general and hazardous waste	N/A	N/A	Condition is no longer applicable at this stage of the project.
	As far as possible, provision should be made for separation of waste for recycling	N/A	N/A	Condition is no longer applicable at this stage of the project.
	Site is secure and there is no unauthorised entry	N/A	N/A	Condition is no longer applicable at this stage of the project.
	No members of the public/ landowners injured as a result of the construction activities	N/A	N/A	Condition is no longer applicable at this stage of the project.
	Appropriate and adequate waste management and sanitation facilities provided at construction site	N/A	N/A	Condition is no longer applicable at this stage of the project.



Ref #	Condition	Compliance Y/N	Compliance Rating	Comments/ Verification
	An incident reporting system must be used to record non-conformances to the EMPr	N/A	N/A	Condition is no longer applicable at this stage of the project.
OBJECTIVE 3: Appropriate management of the construction site and construction workers				
	The siting of the construction equipment camp(s)/ laydown area(s) must take cognisance of any sensitive areas reflected on the sensitivity map	N/A	N/A	Condition is no longer applicable at this stage of the project.
	As far as possible, minimise vegetation clearing and levelling for equipment storage area(s)/ laydown area(s)	N/A	N/A	Condition is no longer applicable at this stage of the project.
	Rehabilitate all disturbed areas as soon as construction is complete within an area, if practically possible. No exotic plants may be used in rehabilitation. Only indigenous plants of the area may be used	Y	4	The Contractor reinstated all work areas after construction. It was reported that the main camp was not reinstated as the landowner requested that everything be left as is. The contractor is in the process of getting a written agreement to this effect.
	Ensure waste containers are maintained and emptied on a regular basis	N	2	There is some waste that remains at the satellite camp.
	"Ensure that all personnel have the appropriate level of environmental awareness and competence to ensure continued environmental due diligence and on-going minimisation/avoidance of environmental harm. This can be achieved through the provision of appropriate environmental awareness training to all personnel. Records of all training undertaken must be kept. Topics must include: » What is meant by "Environment" » Why the environment needs to be protected and conserved » How construction activities can impact on the environment » Awareness of emergency and spills response provisions » Social responsibility during construction activities, e.g. being considerate to local residents	N/A	N/A	Condition is no longer applicable at this stage of the project.



Ref #	Condition	Compliance Y/N	Compliance Rating	Comments/ Verification
	Contractors must use chemical toilets/ablution facilities provided on site; no ablution facilities will be permitted outside the designated areas. A minimum of one toilet shall be provided per 15 persons or less at each working area such as the Contractor's camp	N/A	N/A	Condition is no longer applicable at this stage of the project.
	Ensure ablution facilities are appropriately maintained. Ablutions must be cleaned regularly, and associated waste disposed of at a registered/permitted waste disposal site. The ablutions facilities must be removed from site when construction is completed	N/A	N/A	Condition is no longer applicable at this stage of the project.
	Cooking and eating of meals must take place in a designated area	N/A	N/A	Condition is no longer applicable at this stage of the project.
	No firewood or kindling may be gathered from the site or surrounds	N/A	N/A	Condition is no longer applicable at this stage of the project.
	No open fires are permitted on site and construction personnel must be made aware of the consequences of starting a fire on site to avoid damage to neighbouring farms	N/A	N/A	Condition is no longer applicable at this stage of the project.
	All litter must be deposited in a clearly marked, closed, animal-proof disposal bin in the construction area. Particular attention needs to be paid to food waste	N/A	N/A	Condition is no longer applicable at this stage of the project.
	No plants may be collected from site for medicinal or any other purpose	N/A	N/A	Condition is no longer applicable at this stage of the project.
	No one may disturb flora or fauna in/outside of the demarcated construction area/s	N/A	N/A	Condition is no longer applicable at this stage of the project.
	Fire-fighting equipment and training must be provided before the construction phase commences	N/A	N/A	Condition is no longer applicable at this stage of the project.
	A Code of conduct for construction workers should be implemented	N/A	N/A	Condition is no longer applicable at this stage of the project.
	Contractors must ensure that all workers are informed of the conditions contained in the EMPr before commencing work, specifically consequences of stock theft and trespassing on adjacent farms	N/A	N/A	Condition is no longer applicable at this stage of the project.



Ref #	Condition	Compliance Y/N	Compliance Rating	Comments/ Verification
	Construction workers, except for security personnel – if required, are not allowed to reside on site outside of working hours or without proper supervision	N/A	N/A	Condition is no longer applicable at this stage of the project.
	On completion of the construction phase, all construction workers must leave the site	N/A	-	Some of the contractors' workers were still on site attending to snags.
	Proof of disposal of sewage at an appropriate wastewater treatment works or proof of service slips from a relevant contractor	N/A	N/A	Condition is no longer applicable at this stage of the project. The few workers that remain on site make use of ablution facilities at the switching stations.
	Appropriate training of all staff is undertaken prior to them commencing work on the construction site	N/A	N/A	Condition is no longer applicable at this stage of the project.
6.2	OBJECTIVE 4: Maximise local employment associated with the construction phase			
	Employment of a maximum number of low-skilled to semi- skilled workers for the project from the local area where possible.	N/A	N/A	Condition is no longer applicable at this stage of the project.
	Construction workers should be recruited from the local areas, as far as possible	N/A	N/A	Condition is no longer applicable at this stage of the project.
	The involvement of local labour and previously disadvantaged individuals is promoted.	N/A	N/A	Condition is no longer applicable at this stage of the project.
	Labour, entrepreneurs, businesses, and Small, Medium and Micro-sized Enterprises (SMMEs) from the local sector are awarded jobs/ contracts, where practically possible, based on requirements in the tender documentation.	N/A	N/A	Condition is no longer applicable at this stage of the project.
	OBJECTIVE 5: Minimise impacts related to traffic management and transportation of equipment and materials to site			
	Minimise impact of traffic on local traffic volume, existing infrastructure, property owners, animals, and road users	N/A	N/A	Condition is no longer applicable at this stage of the project.
	To ensure all vehicles are roadworthy and all materials/ equipment are transported appropriately and within any imposed permit/licence conditions	N/A	N/A	Condition is no longer applicable at this stage of the project.
	Strict vehicle safety standards should be implemented and monitored	N/A	N/A	Condition is no longer applicable at this stage of the project.



Ref #	Condition	Compliance Y/N	Compliance Rating	Comments/ Verification
	All relevant permits for abnormal loads must be applied for from the relevant authority	N/A	N/A	Condition is no longer applicable at this stage of the project.
	A designated access to the proposed site must be created to ensure safe entry and exit	N/A	N/A	Condition is no longer applicable at this stage of the project.
	No unnecessary deviation from approved transportation or construction routes must be allowed, unless roads are closed for whatever reason outside the control of the Contractor	N/A	N/A	Condition is no longer applicable at this stage of the project.
	Appropriate road management strategies must be implemented on external and internal roads with all employees and contractors required to abide by standard road and safety procedures	N/A	N/A	Condition is no longer applicable at this stage of the project.
	Any traffic delays resulting from the presence of construction traffic must be co-ordinated with the appropriate authorities	N/A	N/A	Condition is no longer applicable at this stage of the project.
	The movement of all vehicles within the site must be on designated roadways or tracks created for the purpose of construction, or where possible, on existing tracks as far as practically possible	Y	4	All vehicles noted on site were on designated roads.
	Signage must be established at appropriate points warning of turning traffic and the construction site (all signage to be in accordance with prescribed standards)	Y	4	There is road traffic signage on the various roads used on site.
	"Signs must be placed along construction roads to identify speed limits, travel restrictions, and other standard traffic control information. Signage must be appropriately maintained for the duration of the construction period"	Y	4	Speed limit signage was noted on the access roads on site.
	A speed limit of 40km/h should be implemented for vehicles travelling on site in order to minimise dust generation and ensure safety of personnel and the environment and lessen environmental degradation	Y	4	The speed limit on site is 30 km/h.
	All construction vehicles and or machineries travelling on public roads must adhere to the specified speed limits and all drivers must be in possession of an appropriate valid driver's license	Y	4	Construction has been completed and a limited number of vehicles remain on site. No vehicle was noted travelling at excessive speeds, and the safety department ensures that no one is allowed to drive on site without a valid driver's licence.



Ref #	Condition	Compliance Y/N	Compliance Rating	Comments/ Verification
6.2	OBJECTIVE 6: To avoid and or minimise the potential impact of the activities during the construction on the safety of local communities and the potential loss of livestock, game, other fauna and damage to farm infrastructure			
	To avoid and or minimise the potential impact on local communities and their livelihoods			
	The housing of construction workers on the site should be limited to security personnel, if required in addition to the security that will be at the Karusa Wind Farm site.	N/A	N/A	No accommodation is permitted on site.
	Ensure that all farm gates are locked (when not in use) and secure (when in use) at all times	Y	4	Gates were noted either closed or locked during the site inspection.
	Procedures and measures to prevent, and in worst cases, attend to fires should be developed in consultation with the surrounding property owners	N/A	N/A	Condition is no longer applicable at this stage of the project.
	Contact details of emergency and police services should be prominently displayed on site	N/A	N/A	Condition is no longer applicable at this stage of the project.
	"Appropriate fire-fighting equipment must be present on site and members of the workforce should be appropriately trained in using this equipment in the	N/A	N/A	Condition is no longer applicable at this stage of the project.
	Employees, visitors and/or subcontractors should be made well aware of the consequences of any damage to private property and/or loss of livestock, game and/or other fauna	Y	4	This was addressed in the visitor's induction before the site inspection.
	Should there be any damage to private property and/or loss of livestock, game and/or other fauna that can be linked to the Contractor, or any subcontractor, the landowner shall be compensated accordingly upon sufficient proof thereof.	N/A	N/A	Information item, the condition was noted by the Applicant.
	Reasonable Site access control should be implemented.	Y	4	There is a site access control system, and it is controlled by the safety department and the security company.
	OBJECTIVE 7: Management of dust and other air emissions			
	To ensure emissions from all construction vehicles with combustion engines are minimised, where possible, for the duration of the construction phase	N/A	N/A	Condition is no longer applicable at this stage of the project.



Ref #	Condition	Compliance Y/N	Compliance Rating	Comments/ Verification
	To minimise nuisance to the community from dust emissions and to comply with workplace health and safety requirements for the duration of the construction phase	N/A	N/A	Condition is no longer applicable at this stage of the project.
	Access roads must be maintained in a manner that will ensure that nuisance from dust emissions from road or vehicle sources are not visibly excessive	N/A	N/A	Condition is no longer applicable at this stage of the project.
	Ensure that any damage to roads attributed to construction activities is repaired before completion of the construction phase	N/A	N/A	Condition is no longer applicable at this stage of the project.
	Appropriate dust suppressant must be applied on all exposed areas, stockpiles and gravel roads as required to minimise/control airborne dust. These could include the use of water or other appropriate dust suppressants, as determined by the local site conditions and in consultation with the ECO and/or EO	N/A	N/A	Condition is no longer applicable at this stage of the project.
	Haul vehicles moving outside the construction site carrying material that can be wind-blown must be covered with tarpaulins	N/A	N/A	Condition is no longer applicable at this stage of the project.
	A speed limit of 40km/h should be implemented for vehicles travelling on site in order to minimise dust generation and ensure safety of personnel and the environment	Y	4	Speed limit signage was noted on the access roads on site. Speed limits are implemented or vehicles travelling on site.
	Drivers must be made aware of the potential safety issues and enforcement of strict speed limits when they are employed	N/A	N/A	Condition is no longer applicable at this stage of the project.
	Dust-generating activities or earthworks may need to be rescheduled or the frequency of application of dust control/suppressant increased during periods of high winds if excessive visible dust is blowing toward nearby residences outside the site	N/A	N/A	Condition is no longer applicable at this stage of the project.
	Disturbed areas must be re-vegetated as soon as practicable in line with the progression of construction activities	N	2	Some disturbed areas have not been re-vegetated as yet.
	Vehicles and equipment must be maintained in road-worthy condition at all times	N/A	N/A	Condition is no longer applicable at this stage of the project.
	Road worthy certificates in place for all heavy vehicles at outset of construction phase and monitored on a monthly basis	N/A	N/A	Condition is no longer applicable at this stage of the project.



Ref #	Condition	Compliance Y/N	Compliance Rating	Comments/ Verification
	Public complaints register must be developed and maintained on site	Y	4	A complaints register was in place and used to track all official complaints received.
OBJECTIVE 8: Minimisation of development footprint and disturbance to topsoil				
	Stockpiled topsoil should be covered to prevent erosion if deemed necessary by the ECO/EO	N/A	N/A	Condition is no longer applicable at this stage of the project.
	Areas to be cleared must be clearly marked on-site to eliminate the potential for unnecessary clearing	N/A	N/A	Condition is no longer applicable at this stage of the project.
	The extent of clearing and disturbance to the native vegetation must be kept to a minimum so that impact on flora and fauna and their habitats are restricted	N/A	N/A	Condition is no longer applicable at this stage of the project.
	No activities must take place out of the demarcated construction site	N/A	N/A	Condition is no longer applicable at this stage of the project.
	Any fill material required must be sourced from a commercial off-site suitable/permitted source, quarry or borrow pit. Where possible, material from foundation excavations must be used as fill on-site	N/A	N/A	Condition is no longer applicable at this stage of the project.
	Supervision of all clearing and earthworks	N/A	N/A	Condition is no longer applicable at this stage of the project.
OBJECTIVE 9: Minimise the impacts on and loss of indigenous vegetation and faunal habitat and fauna				
	Areas containing protected plant species must be noted and every effort made to reduce the impacts of construction on these areas. Protected plant species in any area to be cleared should be identified and rescued. Permits will be required from NC DENC to remove or translocate protected plant species, if they are to be affected.	N/A	N/A	Condition is no longer applicable at this stage of the project.
	Areas to be cleared must be clearly marked in the field to eliminate unnecessary clearing. In this regard, staff/ employees must be educated to keep construction activities within the demarcated areas.	N/A	N/A	Condition is no longer applicable at this stage of the project.



Ref #	Condition	Compliance Y/N	Compliance Rating	Comments/ Verification
	The extent of clearing and disturbance to the native vegetation must be kept to a minimum so that the impact on flora is restricted.	N/A	N/A	Condition is no longer applicable at this stage of the project.
	A site rehabilitation programme must be implemented.	Y	4	A rehabilitation plan was developed by an Ecologist and implemented during the rehabilitation phase.
	Protected plants identified within the development footprint must not be disturbed or removed prior to a relevant permit being granted.	N/A	N/A	Condition is no longer applicable at this stage of the project.
	Employees must be prohibited from harvesting wild plants for any purpose.	N/A	N/A	Harvesting of plants is not permitted on site.
	Restrict construction activities to post-dawn and pre-dusk.	N/A	N/A	No concerns reported.
	Enforce speed limits of 40km/h within the construction site.	Y	4	The speed limit is 30 km/h is enforced on site.
	ECO and EO must inspect the immediate vegetation for evidence of snares.	N/A	N/A	Condition is no longer applicable at this stage of the project.
	Any fauna directly threatened by the construction activities should be removed to a safe location within a similar environment or 1 km away from the worksite by the ECO or other suitably qualified person, e.g. the EO.	N/A	N/A	Condition is no longer applicable at this stage of the project.
	Construction staff should undergo an environmental induction at the start of the project to ensure that they are aware of the appropriate response to the presence of fauna at the site and do not kill or harm fauna such as snakes or other reptiles which are often feared.	N/A	N/A	Condition is no longer applicable at this stage of the project.
	No trapping or killing of fauna illegally	N/A	N/A	Condition is no longer applicable at this stage of the project.
OBJECTIVE 10: Minimise the establishment and spread of alien invasive plants				
	Avoid creating conditions in which alien plants may become established: » Keep disturbance of indigenous vegetation to a minimum. » Rehabilitate disturbed areas as quickly as possible.	Y	4	No invasive alien plants were noted during the site inspection.



Ref #	Condition	Compliance Y/N	Compliance Rating	Comments/ Verification
	» Do not import soil from areas with alien plants.			
	Establish an on-going monitoring programme to detect and quantify any alien species that may become established and identify the problem species (as per Conservation of Agricultural Resources Act and Biodiversity Act)	Y	4	An alien monitoring program was developed by The Biodiversity Company.
	Immediately control any alien plants that become established using registered control methods	N/A	N/A	Condition is no longer applicable at this stage of the project.
	If any alien invasive species are detected, then the distribution of these should be mapped and investigated	N/A	N/A	Condition is no longer applicable at this stage of the project.
	OBJECTIVE 11: Minimise soil degradation and erosion			
	Identify disturbance areas and restrict construction activity to these areas	N/A	N/A	Condition is no longer applicable at this stage of the project.
	"Rehabilitate disturbance areas as soon as practicable when construction in an area is complete	Y	4	All disturbed areas have been reinstated; however, vegetation regrowth is still limited in some sections.
	Any new access roads are required to be carefully planned and constructed to minimise the impacted area and prevent unnecessary excavation, placement, and compaction of soil	N/A	N/A	Condition is no longer applicable at this stage of the project.
	Minimise unnecessary removal of vegetation which adds stability to soil	N/A	N/A	Condition is no longer applicable at this stage of the project.
	Excavated topsoil must be stockpiled in designated areas separate from base material at a maximum height of 2m and covered (during windy conditions) or vegetated until replaced during rehabilitation	N/A	N/A	Condition is no longer applicable at this stage of the project.
	Topsoil must not be stripped or stockpiled when it is raining or when the soil is wet as compaction will occur. ECO/EO to monitor this activity.	N/A	N/A	Condition is no longer applicable at this stage of the project.
	Implement appropriate erosion control measures (i.e. run-off attenuation on slopes (sand bags, logs), silt fences, storm water catch-pits, shade nets, or temporary mulching over denuded area as required)	N/A	N/A	Condition is no longer applicable at this stage of the project.



Ref #	Condition	Compliance Y/N	Compliance Rating	Comments/ Verification
	Control depth of excavations and stability of cut faces/sidewalls using appropriate methods	N/A	N/A	Condition is no longer applicable at this stage of the project.
	"Implement an appropriate storm	Y	4	A stormwater management plan was compiled and implemented.
6.3	OBJECTIVE 12: Protection of heritage resources			
	Areas required to be cleared during construction must be clearly marked in the field to avoid unnecessary disturbance of adjacent areas.	N/A	N/A	Condition is no longer applicable at this stage of the project.
	Project employees and any contract staff will maintain, at all times, a high level of awareness of the possibility of discovering heritage sites. Familiarise all staff and contractors with procedures for dealing with heritage objects/sites if uncovered.	N/A	N/A	This was addressed in the induction
	Construction managers/foremen should familiarise himself/herself before construction starts on the possible types of heritage sites and cultural material they may encounter and the procedures to follow if they find sites. The ECO and the contractor's EO may be trained to identify/ follow the relevant procedure and report to the site manager if heritage sites are found.	N/A	N/A	Condition is no longer applicable at this stage of the project.
	"If the current layout is changed significantly, i.e. outside of the assessed footprint, an archaeological walk-through survey of the changes must be conducted and further mitigatory recommendations may be made if necessary."	N/A	N/A	Condition is no longer applicable at this stage of the project.
	A person must be trained as a site monitor to report any archaeological sites found during the development. Construction managers/foremen and/or the ECO/ EO/ Environmental Representative should be informed before construction starts on the possible types of heritage sites and cultural material they may encounter and the procedures to follow when they find sites.	N/A	N/A	Condition is no longer applicable at this stage of the project.
	If concentrations of historical and pre-colonial archaeological heritage material and/or human remains (including graves and burials) are potentially uncovered during construction, all work in	N/A	N/A	Condition is no longer applicable at this stage of the project.



Ref #	Condition	Compliance Y/N	Compliance Rating	Comments/ Verification
	the immediate area affecting the find must cease immediately and be reported to the South African Heritage Resources Agency (SAHRA) and/or the MacGregor Museum, Kimberly, so that systematic and professional investigation/excavation can be undertaken. Phase 2 mitigation in the form of test- pitting/sampling or systematic excavations and collections of the pre-colonial shell middens and associated artefacts will then be conducted to establish the contextual status of the sites and possibly remove the archaeological deposit before development activities continue.			
	Appropriate permits obtained from SAHRA prior to the disturbance or destruction of heritage sites, if applicable	N/A	N/A	Condition is no longer applicable at this stage of the project.
OBJECTIVE 13: Minimisation of visual impacts associated with construction				
	Ensure that vegetation is not unnecessarily removed during the construction period	N/A	N/A	Condition is no longer applicable at this stage of the project.
	Reduce the construction period as far as possible through careful logistical planning and productive implementation of resources	N/A	N/A	Condition is no longer applicable at this stage of the project.
	Plan the placement of laydown areas and temporary construction equipment camps in order to minimise vegetation clearing (i.e. in already disturbed areas) wherever possible	N/A	N/A	Condition is no longer applicable at this stage of the project.
	Restrict the activities and movement of construction workers and vehicles to the immediate construction site and existing access roads/ tracks	N/A	N/A	Condition is no longer applicable at this stage of the project.
	Ensure that rubble, litter, and disused construction materials are appropriately stored (if not removed daily) and then disposed regularly at licensed waste facilities	N/A	N/A	Condition is no longer applicable at this stage of the project.
	Reduce and control construction dust using approved dust suppression techniques as and when required (i.e. whenever dust becomes apparent)	N/A	N/A	Condition is no longer applicable at this stage of the project.
	Restrict construction activities to daylight hours whenever possible in order to reduce lighting impacts	N/A	N/A	Condition is no longer applicable at this stage of the project.
	Rehabilitate all disturbed areas immediately after the completion of construction works	N/A	N/A	Condition is no longer applicable at this stage of the project.



Ref #	Condition	Compliance Y/N	Compliance Rating	Comments/ Verification
OBJECTIVE 14: Noise control				
	On-site construction activities should be limited to daylight hours as far as possible	N/A	N/A	Condition is no longer applicable at this stage of the project.
	Construction noise shall be managed according to the Noise Control Regulations and SANS 10103	N/A	N/A	Condition is no longer applicable at this stage of the project.
	All construction equipment, including vehicles, must be properly and appropriately maintained in order to minimise noise generation, e.g. silencers must be in good working order	N/A	N/A	Condition is no longer applicable at this stage of the project.
OBJECTIVE 15: Appropriate handling and management of waste				
	The storage of flammable and combustible liquids such as oils must be in designated areas which are appropriately banded and stored in compliance with Material Safety Data Sheets (MSDS) files.	N/A	N/A	Condition is no longer applicable at this stage of the project.
	"Any spills will receive the necessary clean-up action. Bioremediation kits are to be kept on-site and used to remediate any spills that may occur.	N/A	N/A	Condition is no longer applicable at this stage of the project.
	Any storage and disposal permits/approvals which may be required must be obtained, and the conditions attached to such permits and approvals will be complied with	N/A	N/A	Condition is no longer applicable at this stage of the project.
	Routine servicing and maintenance of vehicles is not to take place on-site (except for emergency situations or e.g. large cranes which cannot be moved off-site). If repairs of vehicles must take place on site, an appropriate drip tray must be used to contain any fuel or oils	N/A	N/A	Condition is no longer applicable at this stage of the project.
	Transport of all hazardous substances must be in accordance with the relevant legislation and regulations	N/A	N/A	Condition is no longer applicable at this stage of the project.
	Waste disposal records must be available for review at any time.	Y	4	Waste disposal records are in place and were regularly submitted to the ECO during the construction phase.
	Construction contractors must provide specific detailed waste management plans to deal with all waste streams	N/A	N/A	Condition is no longer applicable at this stage of the project.
	Specific areas must be designated on-site for the temporary management of various waste streams, i.e. general refuse, construction waste (wood and metal scrap) and contaminated waste. Location of such areas must seek to minimise the potential	N/A	N/A	Condition is no longer applicable at this stage of the project.



Ref #	Condition	Compliance Y/N	Compliance Rating	Comments/ Verification
	for impact on the surrounding environment, including prevention of contaminated runoff, seepage and vermin control			
	Where possible, construction and general wastes on-site must be reused or recycled. Bins and skips must be available on-site for collection, separation and storage of waste streams (such as wood, metals, general refuse etc.)	N/A	N/A	Condition is no longer applicable at this stage of the project.
	Disposal of waste must be in accordance with relevant legislative requirements, including the use of licensed contractors and licensed waste disposal sites	N/A	N/A	Condition is no longer applicable at this stage of the project.
	Hydrocarbon waste must be contained and stored in sealed containers within an appropriately bunded area	N/A	N/A	Condition is no longer applicable at this stage of the project.
	Waste and surplus dangerous goods must be kept to a minimum and must be transported by approved waste contractors to sites designated for their disposal	N/A	N/A	Condition is no longer applicable at this stage of the project.
	Documentation (waste manifest) must be maintained detailing the quantity, nature and fate of any hazardous waste	Y	4	Waste disposal records are in place and were regularly submitted to the ECO during the construction phase.
	All solid waste collected must be disposed of at a registered waste disposal site. A certificate of disposal must be obtained and kept on file. The disposal of waste must be in accordance with all relevant legislation. Under no circumstances may solid waste be burnt or buried on site	Y	4	Waste disposal records are in place and were regularly submitted to the ECO during the construction phase.
	Supply waste collection bins at construction equipment and construction crew camps	N/A	N/A	Condition is no longer applicable at this stage of the project.
	Construction equipment must be refuelled within designated refuelling locations, or where remote refuelling is required, appropriate drip trays must be utilised	N/A	N/A	Condition is no longer applicable at this stage of the project.
	All stored fuels to be maintained within a bund and on a sealed surface	N/A	N/A	Condition is no longer applicable at this stage of the project.
	Fuel storage areas must be inspected regularly to ensure bund stability, integrity and function	N/A	N/A	Condition is no longer applicable at this stage of the project.
	Construction machinery must be stored within a bunded area and on a sealed surface	N/A	N/A	Condition is no longer applicable at this stage of the project.



Ref #	Condition	Compliance Y/N	Compliance Rating	Comments/ Verification
	Oily water from bunds at the substation must be removed from site by licensed contractors	N/A	N/A	Condition is no longer applicable at this stage of the project.
	Spilled cement and concrete must be cleaned up as soon as possible and disposed of at a suitably licensed waste disposal site	N/A	N/A	Condition is no longer applicable at this stage of the project.
	"Corrective action must be undertaken immediately if a complaint is made, or potential/actual leak or spill of polluting substance identified. This includes stopping the contaminant from further escaping, cleaning up the affected environment as much as practically possible. Mitigation: Action/control and implementing preventive measures"	N/A	N/A	Condition is no longer applicable at this stage of the project.
	In the event of a major spill or leak of contaminants, the relevant administering authority must be immediately notified as per the notification of emergencies/incidents. Spill kits to be kept on-site	N/A	N/A	Condition is no longer applicable at this stage of the project.
	Any contaminated/polluted soil removed from the site must be disposed of at a licensed hazardous waste disposal facility	N/A	N/A	Condition is no longer applicable at this stage of the project.
	Upon the completion of construction, the area will be cleared of potentially polluting materials	Y	4	No potentially polluting materials were noted during the site inspection.
OBJECTIVE 16: Appropriate handling and storage of chemicals and hazardous substances				
	Appropriate spill kits must be made available on-site for the clean-up of spills and leaks of contaminants	N/A	N/A	Condition is no longer applicable at this stage of the project.
	Corrective action must be undertaken immediately if a potential/actual leak or spill of a polluting substance is identified. This includes stopping the contaminant from further escaping, cleaning up the affected environment as much as practically possible and implementing preventive measures	N/A	N/A	Condition is no longer applicable at this stage of the project.
	In the event of a major spill or leak of contaminants, the relevant administering authority must be immediately notified as per the notification of emergencies/incidents	N/A	N/A	Condition is no longer applicable at this stage of the project.



Ref #	Condition	Compliance Y/N	Compliance Rating	Comments/ Verification
	Spilled cement must be cleaned up as soon as possible and disposed of at a suitably licensed waste disposal site	N/A	N/A	Condition is no longer applicable at this stage of the project.
	Any contaminated/polluted soil can be stored onsite to a maximum of 90 days before having to be removed from the site and must be disposed of at a licensed hazardous waste disposal facility. If not removed from the site within 90 days, it could require a Waste Management License.	N/A	N/A	Condition is no longer applicable at this stage of the project.
	"Routine servicing and maintenance of vehicles must not take place on-site but on designated bunded areas at the camp (except for emergencies). If repairs of vehicles must take place, an appropriate drip tray must be used to contain any fuel or oils leaks"	N/A	N/A	Condition is no longer applicable at this stage of the project.
	All stored fuels must be maintained within a bunded area and on a sealed surface	N/A	N/A	Condition is no longer applicable at this stage of the project.
	Fuel storage areas must be inspected regularly to ensure bund stability, integrity and function	N/A	N/A	Condition is no longer applicable at this stage of the project.
	Small construction machineries (i.e. stumpers, generators etc.) must be stored in an appropriately sealed area	N/A	N/A	Condition is no longer applicable at this stage of the project.
	The storage of flammable and combustible liquids such as oils will be in designated areas which are appropriately bunded, and stored in compliance with Material Safety Data Sheets (MSDS) files	N/A	N/A	Condition is no longer applicable at this stage of the project.
	Drip trays must be placed under stationery machineries in sensitive areas	N/A	N/A	Condition is no longer applicable at this stage of the project.
	Any storage and disposal permits/approvals which may be required must be obtained, and the conditions attached to such permits and approvals must be compiled with	N/A	N/A	Condition is no longer applicable at this stage of the project.
	Transport of all hazardous substances must be in accordance with the relevant legislation and regulations	N/A	N/A	Condition is no longer applicable at this stage of the project.
	All small chemical substances used onsite must be accompanied by a portable drip tray to store them	N/A	N/A	Condition is no longer applicable at this stage of the project.
	Construction vehicles designated area, agreed manager must with be the washed EO and within the site	N/A	N/A	Condition is no longer applicable at this stage of the project.



Ref #	Condition	Compliance Y/N	Compliance Rating	Comments/ Verification
	The sediment control and water quality structures used on-site must be monitored and maintained in an operational state at all times	N/A	N/A	Condition is no longer applicable at this stage of the project.
	Upon the completion of construction, the area must be cleared of potentially polluting materials	Y	4	No potentially polluting materials were noted during the site inspection.
Detailing Method Statements				
	<p>Specific method statements required may include, inter alia:</p> <ul style="list-style-type: none"> » Site establishment » Preparation of the site » Soil management/stockpiling and erosion control. » Excavations and backfilling procedure. » Stipulate norms and standards for water supply and usage (i.e.: comply strictly to licence and legislation requirements and restrictions, if applicable) » Storm water management procedures » Wash bay for the construction vehicles and or machineries » Ablution facilities (placement, maintenance, management and servicing) » Solid Waste Management: » Liquid waste management: » Dust and noise pollution » Hazardous substance storage (Ensure compliance with all national, regional and local legislation with regard to the storage of oils, fuels, lubricants, solvents, wood treatments, bitumen, cement, pesticides and any other harmful and hazardous substances and materials. South African National Standards apply). » Fire prevention and management measures on site. » Fauna and flora protection process on and off site (i.e. removal to reintroduction or replanting, if necessary). » Incident and accident reporting protocol » Designate access road/ tracks and the protocol while roads are in use. 	N/A	N/A	Condition is no longer applicable at this stage of the project.



Ref #	Condition	Compliance Y/N	Compliance Rating	Comments/ Verification
	» Requirements on gate control protocols.			
	The Contractor may not commence the activity covered by the Method Statement until it has been provided to, reviewed and acceptance by the Site Manager and/or ECO, except in the case of emergencies and then only with the consent of the Site Manager. Review and accepted (or approval where required) of the Method Statement will not absolve the Contractor from their obligations or responsibilities in terms of their contract	N/A	N/A	Condition is no longer applicable at this stage of the project.
	"Failure to submit a method statement may result in suspension of the activity concerned until such time as a method statement has been submitted and approved. The ECO must monitor the construction activities to ensure that these are undertaken in accordance with the approved Method Statement(s).	N/A	N/A	Condition is no longer applicable at this stage of the project.
Awareness and Competence: Construction Phase				
	To achieve effective environmental management, it is important that Contractors are aware of the responsibilities in terms of the relevant environmental legislation and the contents of this EMPr. The Contractor is responsible for informing employees and sub-contractors of their environmental obligations in terms of the environmental specifications, and for ensuring that employees are adequately experienced and properly trained in order to execute the works in a manner that will minimise environmental impacts	N/A	N/A	Condition is no longer applicable at this stage of the project.
	"The Contractors obligations in this regard include the following: >>Employees must have a basic understanding of the key environmental features of the construction site and the surrounding environment.	N/A	N/A	Condition is no longer applicable at this stage of the project.
	Ensuring that a copy of the EMPr is readily available on-site, and that all site employees are aware of the location and have access to the document	N/A	N/A	Condition is no longer applicable at this stage of the project.



Ref #	Condition	Compliance Y/N	Compliance Rating	Comments/ Verification
	Employees shall be familiar with the requirements of the EMPr and the environmental specifications as they apply to the construction of the Project	N/A	N/A	Condition is no longer applicable at this stage of the project.
	Ensuring that, prior to commencing any site works, all employees and sub- contractors have attended an Environmental Awareness Training course (see 6.4.1 below). o The course should be sufficient to provide the site staff with an appreciation of the project's environmental requirements, and how they are to be implemented. » Awareness of any other relevant environmental matters, which are deemed necessary by the ECO	N/A	N/A	Condition is no longer applicable at this stage of the project.
	» Ensure that construction workers have received basic training in environmental management, including the storage and handling of hazardous substances, minimisation of disturbance to sensitive areas, management of waste, and prevention of water pollution.	N/A	N/A	Condition is no longer applicable at this stage of the project.
	"Ensure that employees receive environmental awareness training. » Training should be done either in a written or verbal format but must be appropriate for the receiving audience.	N/A	N/A	Condition is no longer applicable at this stage of the project.
	Ensuring that employee information posters, outlining the environmental “do’s” and “don’ts” are erected at prominent locations throughout the site	N/A	N/A	Condition is no longer applicable at this stage of the project.
	Refresher sessions must be held annually to ensure the contractor staffs are aware of their environmental obligations as practically possible, detailed below	N/A	N/A	Condition is no longer applicable at this stage of the project.
Environmental Awareness Training				
	Environmental Awareness Training must take the form of an on-site talk and demonstration by the ECO and Contractor’s EO before the commencement of site establishment and construction on site. The education/awareness programme should be aimed at all levels of management and construction workers within the contractor team. A record of attendance of this training must be maintained by the	N/A	N/A	Condition is no longer applicable at this stage of the project.



Ref #	Condition	Compliance Y/N	Compliance Rating	Comments/ Verification
	ECO and Contractor's EO on site. Proof of awareness training should be kept on record.			
Induction Training				
	Environmental induction training must be presented to all persons who are to work on the site – be it for short or long durations; Contractor's or Engineer's staff; administrative or site staff; sub-contractors or visitors to the site.	N/A	N/A	Condition is no longer applicable at this stage of the project.
	This induction training should include discussing the proponent's environmental policy and values, the function of the EMPr and Contract Specifications and the importance and reasons for compliance to these. The induction training must highlight overall do's and don'ts on site and clarify the contractual and legal repercussions of non-compliance (penalty fees will be outlined in the service level agreement between the proponent and the contractor). The non-conformance reporting system must be explained during the induction as well. Opportunity for questions and clarifications must form part of this training. A record of attendance of this training must be maintained by the EO on site. Proof of induction training should be kept on record.	N/A	N/A	Condition is no longer applicable at this stage of the project.
Toolbox Talks				
	Toolbox talks should be held on a scheduled and regular basis (at least twice a month/ if when necessary) where foremen, environmental and safety representatives of different components of the Works and sub-consultants hold talks relating to environmental practices and safety awareness on site. These talks should also include discussions on possible common incidents occurring on site and ones recommended by the onsite ECO/EO and the prevention of reoccurrence thereof. Records of attendance and the awareness talk subject must be kept on file.	N/A	N/A	Condition is no longer applicable at this stage of the project.
Monitoring Schedule: Construction Phase				



Ref #	Condition	Compliance Y/N	Compliance Rating	Comments/ Verification
	A monitoring schedule should be in place internally not only to ensure conformance with the conditions of the EMPr, but also to monitor any environmental issues and impacts which have not been accounted for in the EMPr that are, or could result in significant environmental impacts for which corrective action is required. The independent ECO will be responsible for monitoring for the most part although will include others on a needs basis	N/A	N/A	Condition is no longer applicable at this stage of the project.
	"The Project Manager will ensure that the internal monitoring is conducted and reported.	N/A	N/A	Condition is no longer applicable at this stage of the project.
Non-Conformance Reports				
	All supervisory staff including Foremen, Engineers, and the ECO and EO must be provided the means to be able to submit non-conformance reports to the Site Manager. Non-conformance reports will describe, in detail, the cause, nature and effects of any environmental non-conformance by the Contractor. Records of penalties imposed may be required by the relevant authority within 48 (forty eight) hours.	N/A	N/A	Condition is no longer applicable at this stage of the project.
	The non-conformance report will be updated on completion of the corrective measures indicated on the finding sheet. The report must indicate that the remediation measures have been implemented timeously and that the non- conformance can be closed-out to the satisfaction of the Site Manager and ECO/EO	N/A	N/A	Condition is no longer applicable at this stage of the project.
Monitoring Reports				
	Monitoring reports will be compiled by the ECO on a monthly basis and, if requested, must be submitted to DEA for their records. This report should include details of the activities undertaken in the reporting period, any non-conformances or incidents recorded if any, corrective action required, and details of those non-conformances or incidents which have been closed out.	N/A	N/A	Condition is no longer applicable at this stage of the project.
Final Audit Report				



Ref #	Condition	Compliance Y/N	Compliance Rating	Comments/ Verification
	A final Environmental Audit Report must be compiled by an independent auditor and be submitted to DEA upon completion of the construction and rehabilitation activities. This report must indicate the date of the audit, the name of the auditor and the outcome of the audit in terms of compliance with the Environmental Authorisation conditions and the requirements of the EMPr.	Y	4	EIMS (Pty) has been appointed to undertake the final Environmental Audit and submit the report to the DFFE.
MANAGEMENT PROGRAMME: REHABILITATION CHAPTER 7-				
OBJECTIVE 1: Ensure appropriate rehabilitation of disturbed areas such that residual environmental impacts are remediated or curtailed				
	"All temporary facilities, equipment, materials	N	2	Not all materials had been removed from site at the time of the audit. Some materials still remained at the contractor's main and satellite camps. It was reported that the landowner requested the camp to be left unrehabilitated, however, an agreement in writing to this effect was not yet available. It was further reported that the lease agreement for the satellite camp would be taken over by EGP.
	All temporary fencing and danger tape must be removed once the construction phase has been completed	N	2	The fence at the main camp used by WHBO (powerline contractor) was still in place at the time of the audit and no written agreement to leave this in place was available at the time of the audit.
	The area that previously housed the construction equipment camp is to be checked for spills of substances such as oil, paint, etc. and these should be cleaned up	Y	4	No hydrocarbon spills were noted at the time of the audit.
	"All hardened surfaces within the construction equipment camp area, not forming part of permanent laydown areas, should be ripped, all imported materials removed, and the area shall be top soiled and re-vegetated"	N	0	The construction camp area had not been rehabilitated at the time of the audit. It was reported that the landowner requested that this area be left as is, however, no recorded agreement to this effect was available.
	Temporary roads must be closed and access across these blocked	Y	4	All temporary roads and accesses used during construction have been reinstated and are no longer in use.



Ref #	Condition	Compliance Y/N	Compliance Rating	Comments/ Verification
	Necessary drainage works and anti-erosion measures must be installed, where required, to minimise loss of topsoil and control erosion	Y	4	The use of diversion berms was noted on access roads to reduce the velocity of run off.
	Rehabilitation must be in line with the requirements of the landowner for the land use (except in those areas of remaining natural vegetation which are disturbed)	N	2	Rehabilitation of the powerline route is in line with the adjacent natural vegetation. The main and satellite camps were not rehabilitated at the time of the audit.
	Re-vegetated areas may have to be protected from wind erosion and maintained until an acceptable plant cover has been achieved	Y	4	Although revegetation of rehabilitated areas is still poor, no erosion was noted.
	Erosion control measures should be used in sensitive areas	Y	4	Diversion berms were noted in use on steep slopes.
	Alien plant management must be undertaken as per the alien management and monitoring plan to be developed pre-construction	Y	4	An alien monitoring program was developed by The Biodiversity Company and implemented during construction and rehabilitation.
	Topsoil replaced on all areas and stabilised where practicable	Y	4	Topsoil has been reinstated in a majority of disturbed areas.
	On-going alien plant monitoring (as per the Alien Invasive Management Plan- refer to Appendix C) and removal should be undertaken on all areas of natural vegetation on an annual basis.	Y	4	No invasive alien plants were noted during the site inspection.



5.3 FINDINGS OF THE AUDIT


Findings from the compliance evaluation are presented below.

5.3.1 FINDINGS FROM THE COMPLIANCE EVALUATION OF THE EA AND EMPr

Table 7: Table of findings of the audit.

Finding #	EA / EMPr Ref #	Requirement Description	Findings and Recommendations
Environmental Authorization			
1	11	<p>The holder of the authorisation must publish a notice -</p> <p>11.1. informing interested and affected parties of the decision;</p> <p>11.2. informing interested and affected parties where the decision can be accessed; and</p> <p>11.3. drawing the attention of interested and affected parties to the fact that an appeal may be lodged against this decision in terms of the National Appeal Regulations, 2014.</p>	<p>Proof of publishing a notice informing interested and affected parties of the decision; where it can be accessed; and drawing the attention of I&APs to the fact that an appeal may be lodged against the EA decision in terms of the National Appeal Regulations, 2014 was not available at the time of the audit.</p>
2	36	<p>All areas disturbed must be rehabilitated and re-seeded with indigenous plants at the end of the construction phase.</p>	<p>The contractor reported that seeding was only undertaken in certain areas and not all disturbed areas as required by the EA. Poor regrowth was also noted in isolated areas.</p>



Finding #	EA / EMPr Ref #	Requirement Description	Findings and Recommendations
			
3	37	All construction material, equipment and any other foreign objects brought into the area by contractors and staff must be removed immediately after construction.	The camp has not yet been cleared of all materials. It was reported that a private agreement was made with the farmer to store some containers and equipment during the construction period. It was reported that the lease agreement will be taken over by EGP in October 2022. No proof of such agreement was provided to the auditor.



Finding #	EA / EMPr Ref #	Requirement Description	Findings and Recommendations
4	38	Any solid waste must be disposed of at a landfill licensed in terms of section 20 (b) of the National Environment Management Waste Act, 2008 (Act No.59 of 2008).	Waste was observed at the satellite camp, and it has to be disposed accordingly.






Finding #	EA / EMPr Ref #	Requirement Description	Findings and Recommendations
5	39	<p>39. A copy of this environmental authorisation, the audit and compliance monitoring reports, and the approved EMPr, must be made available for inspection and copying 39.1. at the site of the authorised activity;</p> <p>39.2. to anyone on request; and</p> <p>39.3. where the holder of the environmental authorisation has a website, on such publicly accessible website.</p>	Copies of all documents are available on site for inspection; however, these have not been made available on the EGP website as required by the EA.
Environmental Management Programme			
1	5.1	Develop and implement a grievance mechanism for the construction, operational and decommissioning phases of the project for all employees, contractors, subcontractors and site personnel. This procedure should be in line with the South African Labour Law.	A grievance procedure was developed, and a complaints register was in place and used to track all official complaints received during the construction phase. However, the procedure did not address operational and decommissioning phases of the project
2	6.2	Ensure waste containers are maintained and emptied on a regular basis	There is some waste that remains at the satellite camp.



Finding #	EA / EMPr Ref #	Requirement Description	Findings and Recommendations
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Finding #	EA / EMPr Ref #	Requirement Description	Findings and Recommendations
3	6.2	Disturbed areas must be re-vegetated as soon as practicable in line with the progression of construction activities	Some disturbed areas have not been re-vegetated as yet. Furthermore, some disturbed areas have not yet been reinstated.
			



Finding #	EA / EMPr Ref #	Requirement Description	Findings and Recommendations
4	7.1	<p>All temporary facilities, equipment, materials (including spoil material) removed from site</p> <p>All temporary fencing and danger tape must be removed once the construction phase has been completed</p>	<p>Not all materials had been removed from site at the time of the audit. Some materials still remained at the contractor's main and satellite camps. It was reported that the landowner requested the camp to be left unrehabilitated, however, an agreement in writing to this effect was not yet available. It was further reported that the lease agreement for the satellite camp would be taken over by EGP.</p> <p>The fence at the main camp was still in place at the time of the audit and no written agreement to leave this in place was available at the time of the audit.</p>





Finding #	EA / EMPr Ref #	Requirement Description	Findings and Recommendations
5	7.1	All hardened surfaces within the construction equipment camp area, not forming part of permanent laydown areas, should be ripped, all imported materials removed, and the area shall be top soiled and re-vegetated.	The construction camp area had not been rehabilitated at the time of the audit. It was reported that the landowner requested that this area be left as is, however, no recorded agreement to this effect was available.
6	7.1	Rehabilitation must be in line with the requirements of the landowner for the land use (except in those areas of remaining natural vegetation which are disturbed).	Rehabilitation of the powerline route is in line with the adjacent natural vegetation. The main and satellite camps were not rehabilitated at the time of the audit.



5.4 CONTINUED ADEQUACY OF THE EMPr

Based on the information review, and areas inspected at the time of the audit. The EMPr is currently considered adequate and effective to manage and mitigate the impacts of the Karusa Wind farm powerline and associated infrastructure. No shortcomings in the effectiveness or adequacy of the EMPr were noted during the audit.

5.4.1 NEW IMPACTS IDENTIFIED

No new impacts were identified.

5.4.2 EFFECTIVENESS OF THE EMPr

Based on the information review, and areas inspected at the time of the audit, the EMPr is currently considered adequate and effective to manage and mitigate the impacts.

5.4.3 SHORTCOMINGS IN THE EMPr

No shortcomings were identified in the EMPr.



6 PHOTOGRAPHIC RECORD



Figure 3: View of the Karusa substation.



Figure 4: View of bare stream crossing along the Karusa overhead powerline.



Figure 5: View of access road used along the 132kV powerline.



Figure 6: View of an area previously sloped to achieve conductor ground clearance.



Figure 7: View of the 132kV overhead powerline road crossing.



Figure 8: View of the Karusa overhead powerline connection to the Eskom Komsberg substation.



7 CONCLUSION

Karusa appointed EIMS to conduct an external NEMA audit of the EA and approved EMPr, in compliance with the issued EA and approved EMPr. Additional to the EA and EMPr requirements, scheduled Environmental Compliance Audits are required to be undertaken in terms of Regulation 34 of the National Environmental Management Act, Act 107 of 1998 (NEMA) Environmental Impact Assessment (EIA) Regulations, 2014 (as amended).

A total of 38 conditions of the EA were identified and evaluated. 15 of these conditions were considered not applicable to the current phase of the project and 23 were deemed applicable. Of the applicable conditions a total of 18 conditions were noted to be fully compliant, 4 partially compliant and 1 condition was non-compliant. The level of compliance for each condition was calculated according to the methodology described in section 4.2. Utilising this scoring system, a total weighted compliance score of 86,96% was obtained for this audit.

A total of 208 conditions of the EMPr were identified and evaluated. 168 of these conditions were considered not applicable to the current phase of the project and 41 were deemed applicable. Of the applicable conditions a total of 34 conditions were noted to be fully compliant, 6 partially compliant and 1 condition was non-compliant. The level of compliance for each condition was calculated according to the methodology described in section 4.2. Utilising this scoring system, a total weighted compliance score of 90,24% was obtained for this audit.

8 ASSUMPTIONS, LIMITATIONS AND GAPS IN KNOWLEDGE

The following assumptions, limitations and gaps in knowledge apply to the audit:

- The information contained in this report was sourced from information and data supplied by third parties that is assumed to be complete, valid and true.
- This audit is undertaken on compliance with the EMPr prepared by Savannah Environmental (Pty) Ltd dated August 2019.
- This report is based on information available at the time of the assessment. The information, data, observations and evidence on what this report is based is beyond the control of EIMS and may change without notice. EIMS will not be liable for any loss or damage which may arise directly or indirectly because of such changes.
- This audit does not specifically assess compliance with any other permits, licences or authorisations applicable to the operations.
- No representation or warranty, express or implied, is or will be made in relation to, and no responsibility or liability is or will be accepted by EIMS in relation to the accuracy of this report.
- Where reference is made to legislation or other statutory provisions in this report the original legislation or other statutory provisions will always take precedence and the reader is directed to revert to the original legislation or statutes.
- As a result of time constraints, the site inspection did not include all of the Karusa 132kV powerline areas. Future audits should aim to inspect the areas which were not visited during this inspection.