



BIOTHERM ENERGY (PTY) LTD

Proposed Development of the Aletta 140MW Wind Energy Facility (WEF) and Associated Infrastructure near Copperton, Northern Cape Province

Final Environmental Authorisation (EA) Amendment Motivation Report

DEA Reference Number: 14/12/16/3/3/2/945/AM1

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BIOTHERM ENERGY (PTY) LTD

PROPOSED DEVELOPMENT OF THE ALETTA 140MW WIND ENERGY FACILITY (WEF) AND ASSOCIATED INFRASTRUCTURE NEAR COPPERTON, NORTHERN CAPE PROVINCE

FINAL ENVIRONMENTAL AUTHORISATION (EA) AMENDMENT MOTIVATION REPORT

Executive Summary

SiVEST SA (Pty) Ltd (hereafter referred to as SiVEST) was appointed by BioTherm Energy (Pty) Ltd (hereafter referred to as "BioTherm") in 2015 as the independent Environmental Assessment Practitioner (EAP) to undertake the Environmental Impact Assessment (EIA) process for the proposed development of the 140MW Aletta Wind Energy Facility (WEF) and its associated infrastructure, near Copperton in the Northern Cape Province (hereafter referred to as the "proposed development"). The overall objective of the proposed development was to generate electricity to feed into the national grid.

As the proposed WEF is located within the declared Karoo Central Astronomy Advantage Area, a Path Loss and Risk Assessment, including an Emission Control Plan (ECP), was undertaken to assess the impact of the proposed WEF on the Square Kilometre Array (SKA). This assessment and the ECP related to a specific turbine available for consideration at the time, this being the Acciona AW 125 TH 100A, with a hub height of 100m and a rotor diameter of 125m.

Following the conclusion of the EIA process, BioTherm was subsequently issued with an Environmental Authorisation (EA) for the proposed development on 09 May 2017 (DEA Reference Number: 14/12/16/3/3/2/945). The EIA process and associated specialist studies considered the impacts of turbines with maximum hub heights of 120m and maximum rotor diameters of 150m. The Department of Environmental Affairs (DEA), however, reduced the authorised turbine specifications based on the provided Path Loss and Risk Assessment and ECP, which was based on the Acciona AW 125 TH 100A (Fouché, C., 2016). The turbine specifications authorised were intended to reduce the potential risk of adverse impacts of wind turbines on the SKA.

BioTherm is now proposing a larger turbine for the proposed development, namely the Acciona AW 140/3465 TH 120 with a hub height of 120m and a rotor diameter of 140m. The proposed higher hub height takes advantage of the high wind shear on site which increases the wind speeds available. In addition, the larger rotor diameter means that the turbines can capture more of the energy in the wind.

SiVEST was therefore appointed as the independent EAP to apply for an Amendment of the EA in order to increase the authorised turbine dimensions to have a hub height of 120m, a rotor diameter of 140m and a generation output of 3.465MW each.

The amendments to the EA which are now being requested include the following:

Page 8:

FROM:

• 60 wind turbines with a total output of 140MW. Turbines will have a hub height of 100m, a rotor diameter of 125m and a generation output of 3MW each.

TO:

• 60 wind turbines with a total output of 140MW. Turbines will have a hub height of 120m, a rotor diameter of 140m and a generation output of 3.465MW each.

Page 9 (Technical details of the proposed facility):

FROM:

Component	Description / Dimensions
Hub height from ground level	100m
Rotor diameter	125m

TO:

Component	Description / Dimensions
Hub height from ground level	120m
Rotor diameter	140m

Page 9 (Scope of authorisation No. 2):

FROM:

2. Only a wind turbine generator with the following specifications are authorised: An Acciona AW 125 TH 100A with a 100m hub height, 125m rotor diameter and a 3MW output.

TO:

2. Only a wind turbine generator with the following specifications are authorised: An Acciona AW 140/3465 TH 120 with a 120m hub height, 140m rotor diameter and a 3.465MW output.

■ Page 17 (Turbine position No. 37):

FROM:

37. Only a wind turbine generator with the following specifications are authorised: An Acciona AW 125 TH 100A with a 100m hub height, 125m rotor diameter and a 3MW output.

TO:

37. Only a wind turbine generator with the following specifications are authorised: An Acciona AW 140/3465 TH 120 with a 120m hub height, 140m rotor diameter and a 3.465MW output.

Page 28 (Findings):

FROM:

e) Only a wind turbine generator with the following specifications are authorised: An Acciona AW 125 TH 100A with a 100m hub height, 125m rotor diameter and a 3MW output.

<u>TO</u>:

e) Only a wind turbine generator with the following specifications are authorised: An Acciona AW 140/3465 TH 120 with a 120m hub height, 140m rotor diameter and a 3.465MW output.

As part of the original EIA process for the proposed 140MW Aletta WEF and its associated infrastructure, the following specialist studies were undertaken:

- Biodiversity Assessment;
- Avifauna Assessment (including pre-construction monitoring);
- Bat Assessment (including pre-construction monitoring);
- Surface Water Impact Assessment;
- Soils and Agricultural Potential Assessment;
- Noise Assessment:
- Visual Impact Assessment;
- Heritage and Palaeontology Assessment;
- Socio-economic Impact Assessment;
- Traffic Assessment; and
- Electromagnetic Interference Path Loss and Risk Assessment (Including Emission Control Plan).

The EIA process and above-mentioned associated specialist studies, except for the Electromagnetic Interference Path Loss and Risk Assessment, considered the impacts of turbines with maximum hub heights of 120m and with maximum rotor diameters of 150m. Therefore, the proposed turbine dimensions are still in-line with the specialist assessments undertaken for the WEF and findings set out in the Final Environmental Impact Assessment Report (FEIAr) dated 20 January 2017. Further assessment was only required by the Electromagnetic Compatibility specialist and it was subsequently determined that the proposed Acciona AW 140/3465 TH 120 turbine model will not result in increased risks of electromagnetic emissions from the WEF and that no new mitigation measures will be required. Acciona confirmed that the AW 140/3465 TH 120 turbine's emissions are similar as per the Acciona AW 125 TH 100A and thus there is no need to change the ECP. This was confirmed by ITC.

The proposed change in output of each turbine from 3MW to 3.465MW will have no bearing on the specialist findings or environmental impacts as the proposed number of turbines, hub height and a rotor diameter are still in-line with the assessed turbine specifications. The proposed amendments will not result in any additional negative environmental impacts, over-and-above those already assessed in the FEIAr and authorised in the EA, and will not change the nature or scope of the project from what was assessed.

The findings of the Path Loss and Electrical Design Change Evaluation are summarised in **Table ii** below and a copy is provided in **Appendix E**.

Table ii: Summary of Path Loss and Electrical Design Change Evaluation of Acciona AW 140/3465 TH 120 Wind Turbine

Environmental	Environmental Summary of major findings	
Parameter	, ,	
Path Loss and Electrical Design Change	Since drafting the Electromagnetic Control Plan (CP 6778/16) for the Aletta Wind farm in 2016, the turbine of choice for the development has changed from the Acciona Model AW3000/125 TH100 50Hz wind turbine to Acciona Model AW 140/3465 TH120.	
	In order to confirm the validity of the proposed mitigation measures, the Acciona Engineering department issued a comparison between the two (2) turbine models to confirm the electrical similarity.	
	The path loss calculations were repeated at a hub height of 100m and 120m to confirm the attenuation requirements and to ensure no discrepancy would arise due to location variations.	
	Little impact on the path loss values was found due to the increase of the hub height from 100m to 120m except in the case of WTG 31 to SKA 1895 where the 20m height difference caused a 26dB reduction in path loss. The impact on the path loss values to the core is however less than 1.5dB.	
	Although there is a 26 dB reduction in path loss due to the hub height change, the initial mitigation requirements in CP 6778/16 was based on a minimum path loss of 134dB @ 6GHz whereas the reduced path loss of WTG 31 to SKA 1895 is still 136dB (2dB more than the previous minimum).	
	According to the design change statement from Acciona (Appendix A of Path Loss and Electrical Design Change Evaluation), there is no foreseen risk of increasing the electromagnetic emissions of the WEF that would require additional mitigation measures to be developed to fulfill the SKA requirements, notwithstanding that the Aletta WEF's control plan and path loss calculations be updated.	

In conclusion, the change in hub height and minor electrical differences between the AW125 TH100A and AW 140/3465 TH120 does not impact on the mitigation requirements as set out in the Path Loss and Risk Assessment Report for New Aletta WEF Layout Including Emission Control Plan for the AW125 TH 100A WTG (CP6778/16).

It should be noted that BioTherm sent the above-mentioned Path Loss and Electrical Design Change Evaluation to the South African Radio Astronomy Observatory (SARAO) for final review and approval upon its completion. Having assessed the proposed amendments to the turbine specifications, SARAO stated that they do not anticipate any negative impact on the SKA and that the modifications to the Aletta WEF do not impact on the previously agreed path loss mitigation measures. Accordingly, SARAO has raised no objection to the proposed amendments. A letter from SARAO which confirms this has been provided in **Appendix C4**.

An application to amend the EA according to the above-mentioned proposed amendments was submitted to the DEA on 11 April 2019. All affected landowners, as well as the relevant provincial authority, were notified about the EA Amendment Application which was submitted (**Appendix C6**). The Department subsequently acknowledged having received the application on the same day (namely 11 April 2019) and assigned the following reference number for the amendment process: 14/12/16/3/3/2/945/AM1. Following the review of the application for amendment of the EA, the DEA concluded that the proposed amendments are considered a change of scope. The application therefore falls within the ambit of amendments to be applied for in terms of Part 2 of Chapter 5 of the Environmental Impact Assessment (EIA) Regulations, 2014, as amended. In light of this, the EAP was referred to regulation 32 of GN R. 982. A copy of the abovementioned DEA Acknowledgment Letter is provided in **Appendix B**. In light of the DEA's response, a Part 2 amendment process is being followed accordingly.

Advertisements (English and Afrikaans) were placed in the "Gemsbok" local newspaper on Wednesday the 29th of May 2019 (Appendix C2). Accordingly, site notices were also placed on the boundary of the application site on Friday the 31st of May 2019. Refer to Appendix C1 for a copy of the site notices. Proof of the site notices (photos and GPS coordinates) which were erected have also been included in Appendix C1 of the Final EA Amendment Motivation Report. Where stakeholders responded (Appendix C4) to advertisements, they were registered on the project database and sent letters of invitation to participate. It should be noted that all I&APs and Organs of State / Authorities were given 30 days to comment on the Draft EA Amendment Motivation Report, which was compiled in terms of regulation 32(1)(a) of GN R. 982. The Draft EA Amendment Motivation Report was subsequently made available to the public for review and comment on SiVEST's website (http://www.sivest.co.za/, click on Downloads, then browse to the folder '15499 Aletta WEF Amendment') for a period of 30 days from Monday 03 June 2019 to Friday 05 July 2019. All comments received throughout the EA amendment process (including comments received during the Draft EA Amendment Motivation Report's commenting period) were incorporated into the Final Amendment Motivation Report, which was submitted to the competent authority (namely the DEA) for decision-making on 15 July 2019. Additionally, all comments received throughout the EA amendment process were also included and responded to in the Comments and Response Report (C&RR) (Appendix C5). As such, the

Public Participation Process has been conducted as outlined in Chapter 6 of the EIA Regulations, 2014, as amended.

It should be noted that following the 30-day comment and review period of the Draft EA Amendment Motivation Report, none of the I&APs, key stakeholders or Organs of State (OoS) / Authorities which were consulted throughout the EA amendment process raised ay objections to the proposed amendments. With regards to the SKA, SARAO undertook a basic desktop study and came to the conclusion that the proposed amendments do not significantly change the path loss between the facility and the nearest SKA infrastructure and as such will not impact on the previously agreed path loss mitigation requirements and emission control. Based on this, SARAO do not have any objections to the proposed amendments. As mentioned, all comments received during the 30-day comment and review period of the Draft EA Amendment Motivation Report have been included and responded to in the C&RR (**Appendix C5**). In addition, all comments received during the 30-day comment and review period of the Draft EA Amendment Motivation Report are included in **Appendix C4**.

Despite the fact that no new mitigation measures will be required as a result of the proposed amendments, the Environmental Management Programme (EMPr) which was submitted as part of the FEIAr dated 20 January 2017 has been was updated to include generic recommendations and/or conditions received from OoS / Authorities during the 30-day comment and review period of the Draft EA Amendment Motivation Report. The Draft EMPr is provided in **Appendix D**.

Although the new specifications are still in-line with the specialist assessments undertaken for the WEF and findings set out in the FEIAr, the EA issued on 09 May 2017 will need to be amended to reflect the larger turbine specifications. It was however confirmed that the proposed amendments will not result in any additional negative environmental impacts, over-and-above those already assessed in the FEIAr and authorised in the EA issued and will not change the nature or scope of the proposed development from what was assessed. As such, it is requested that the EA be amended to allow for increased turbine dimensions as detailed above.

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FINAL ENVIRONMENTAL AUTHORISATION (EA) AMENDMENT MOTIVATION REPORT

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Appendices

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Appendix B: Authority Consultation **Appendix C:** Public Participation

Appendix C1: Proof of Written Notification **Appendix C2:** Proof of Advertisements

Appendix C3: I&AP Database
Appendix C4: Correspondence

Appendix C5: Comments and Response Report **Appendix C6:** Landowner and Authority Notifications

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Appendix D: Draft Environmental Management Programme (EMPr)

Appendix E: Path Loss and Electrical Design Change Evaluation of Acciona AW 140/3465 TH

120 Wind Turbine

Appendix F: Maps

Appendix G: Project Team CV's

GLOSSARY OF TERMS

ABBREVIATIONS

ATNS - Air Traffic Navigation Services

C&RR - Comments and Response Report

CV - Curriculum Vitae

DAFF - Department of Agriculture, Forestry and Fisheries

DEA - Department of Environmental AffairsDMR - Department of Mineral Resources

DoE - Department of Energy

DWS - Department of Water & Sanitation

EA - Environmental Authorisation

EAP - Environmental Assessment Practitioner

ECP - Emissions Control Plan

EIA - Environmental Impact Assessment

EIAr - Environmental Impact Assessment Report

EMC - Electromagnetic CompatibilityEMI - Electromagnetic Interference

EMPr - Environmental Management Programme

ESA - Early Stone Age

EWT - Endangered Wildlife Trust

FEIAr - Final Environmental Impact Assessment Report

GIS - Geographic Information System

GN - Government Notice

GPS - Global Positioning System
HIA - Heritage Impact Assessment
I&AP(s) - Interested and Affected Parties
IPP(s) - Independent Power Producers

KM - Kilometre(s)M - Metres

MSA - Middle Stone Age

MW - Megawatt

NCR - National Noise Control Regulations

NC DENC - Northern Cape Department of Environment and Nature Conservation
NEMA - National Environmental Management Act (Act No. 107 of 1998)

OoS - Organs of State
RE - Renewable Energy

REIPPPP - Renewable Energy Independent Power Producer Procurement Programme

PPA - Power Purchase Agreement
PPP - Public Participation Process

SA - South Africa

SA CAA - South African Civil Aviation Authority

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Proposed Development of the Aletta 140MW Wind Energy Facility (WEF) - Final EA Amendment Report

SAHRA - South African Heritage Resources Agency

SANRAL - South African National Roads Agency SOC Limited

SKA - Square Kilometre Array
WEF - Wind Energy Facility

WESSA - Wildlife & Environment Society of South Africa

WTG - Wind Turbine Generator

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FINAL ENVIRONMENTAL AUTHORISATION (EA) AMENDMENT MOTIVATION REPORT

1 INTRODUCTION

SiVEST SA (Pty) Ltd (hereafter referred to as SiVEST) was appointed by BioTherm Energy (Pty) Ltd (hereafter referred to as "BioTherm") in 2015 as the independent Environmental Assessment Practitioner (EAP) to undertake the Environmental Impact Assessment (EIA) process for the proposed development of the 140MW Aletta Wind Energy Facility (WEF) and its associated infrastructure, near Copperton in the Northern Cape Province (hereafter referred to as the "proposed development"). The overall objective of the proposed development was to generate electricity to feed into the national grid.

As the proposed WEF is located within the declared Karoo Central Astronomy Advantage Area, a Path Loss and Risk Assessment, including an Emission Control Plan (ECP), was undertaken to assess the impact of the proposed WEF on the Square Kilometre Array (SKA). This assessment and the ECP related to a specific turbine available for consideration at the time, this being the Acciona AW 125 TH 100A, with a hub height of 100m and a rotor diameter of 125m.

Following the conclusion of the EIA process, BioTherm was subsequently issued with an Environmental Authorisation (EA) for the proposed development on 09 May 2017 (DEA Reference Number: 14/12/16/3/3/2/945). The EIA process and associated specialist studies considered the impacts of turbines with maximum hub heights of 120m and maximum rotor diameters of 150m. The Department of Environmental Affairs (DEA), however, reduced the authorised turbine specifications based on the provided Path Loss and Risk Assessment and ECP, which was based on the Acciona AW 125 TH 100A (Fouché, C., 2016). The turbine specifications authorised were intended to reduce the potential risk of adverse impacts of wind turbines on the SKA.

BioTherm is now proposing a larger turbine for the proposed development, namely the Acciona AW 140/3465 TH 120 with a hub height of 120m and a rotor diameter of 140m. The proposed higher hub height takes advantage of the high wind shear on site which increases the wind speeds available. In addition, the larger rotor diameter means that the turbines can capture more of the energy in the wind.

As such, BioTherm has appointed SiVEST to act as the independent EAP to undertake the proposed amendment process. An application to amend the EA according to the proposed amendments was subsequently submitted to the DEA on 11 April 2019. The Department acknowledged having received the

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application on the same day and assigned the following reference number for the amendment process: https://dx.nd/1.2/16/3/3/2/945/AM1. Following the review of the application for amendment of the EA, the DEA came to the conclusion that the proposed amendments are considered a change of scope. The application therefore falls within the ambit of amendments to be applied for in terms of Part 2 of Chapter 5 of the EIA Regulations 2014, as amended. In light of this, the EAP was referred to regulation 32 of GN R. 982. A copy of the above-mentioned DEA Acknowledgment Letter is provided in **Appendix B**.

In accordance with Regulation 32 (1) of the EIA Regulations 2014, as amended, a Part 2 amendment process is being followed accordingly, which will include:

- (a) A report, reflecting
 - i. an assessment of all impacts related to the proposed change;
 - ii. advantages and disadvantages associated with the proposed change;
 - iii. measures to ensure avoidance, management and mitigation of impacts associated with such proposed change; and
 - iv. any changes required to the EMPr;

which report -

(aa) had been subjected to a public participation process, which had been agreed to by the competent authority, and which was appropriate to bring the proposed change to the attention of potential and registered interested and affected parties, including organs of state, which have jurisdiction in respect of any aspect of the relevant activity, and the competent authority, and (bb) reflects incorporation of comments received, including any comments of the competent authority.

In light of the above, an EA Amendment Motivation Report has been compiled in terms of regulation 32(1)(a) of GN R. 982 accordingly. All the above legislated requirements have been met and are included this Final EA Amendment Motivation Report.

The details of how the requirements in terms of Regulation 32 (1)(a) of the EIA Regulations 2014, as amended, have been addressed are provided in **Table 1** below.

Table 1: Requirements in terms of Regulation 32 (1)(a) of EIA Regulations 2014, as amended

Requirements in terms of Regulation 32(1)(a) of	Notes / Comments
the EIA Regulations 2014, as amended.	
The applicant must within 90 days of receipt by the	The Application for Amendment of the EA dated 9
competent authority of the application made in	May 2019 was submitted to the DEA on 11 April
terms of regulation 31, submit to the competent	2019 and subsequently acknowledged on the
authority-	same day (DEA Ref No.: <u>14/12/16/3/3/2/945/AM1</u>).
(a) a report, reflecting -	In addition, the Draft EA Amendment Motivation
	Report was submitted to the DEA on 3 June 2019.
	The DEA acknowledged receipt of the Draft EA
	Amendment Motivation Report on 12 June 2019

(Appendix B). All I&APs and Organs of State (OoS) / Authorities were subsequently given 30 days to comment on the Draft EA Amendment Motivation Report, which was compiled in terms of regulation 32(1)(a) of GN R. 982. The Draft EA Amendment Motivation report was made available for review and comment for a period of 30 days from Monday 03 June 2019 to Friday 05 July 2019. Following the 30-day comment and review period of the Draft EA Amendment Motivation Report, all comments received were incorporated into the Final Amendment Motivation Report, which was submitted to the DEA for decision-making on 15 July 2019. All legislated / prescribed timeframes have therefore been adhered to (refer to **Appendix B** for all consultation with the competent authority). i. An assessment of all impacts of the Refer to **Section 3**. It should be noted that the new proposed change; proposed specifications are still in-line with the specialist assessments undertaken for the WEF and findings set out in the Final Environmental Impact Assessment Report (FEIAr) dated 20 January 2017. The proposed change in output of each turbine from 3MW to 3.465MW will have no bearing on the specialist findings or environmental impacts as the proposed number of turbines, hub height and a rotor diameter are still in-line with the assessed turbine specifications. The proposed amendments will not result in any additional negative environmental impacts, over-and-above those already assessed in the FEIAr and authorised in the EA, and will not change the nature or scope of the project from what was assessed. Refer to Section 5 ii. Advantages and disadvantages associated with the proposed change; Refer to **Section 4**. It should be noted that the new iii. Measures to ensure avoidance. management and mitigation of impacts proposed specifications are still in-line with the associated with the proposed change. specialist assessments undertaken for the WEF and findings set out in the Final Environmental Impact Assessment Report (FEIAr) dated 20 January 2017. The proposed change in output of each turbine from 3MW to 3.465MW will have no bearing on the specialist findings or environmental

impacts as the proposed number of turbines, hub height and a rotor diameter are still in-line with the assessed turbine specifications. The proposed amendments will not result in any additional negative environmental impacts, over-and-above those already assessed in the FEIAr and authorised in the EA, and will not change the nature or scope of the project from what was assessed.

As such, no new mitigation measures will be required.

iv. Any changes to the EMPr.

Since the proposed amendments will not result in any additional negative environmental impacts, over-and-above those already assessed in the FEIAr and authorised in the EA, will not change the nature or scope of the project from what was assessed, and no new mitigation measures will be required, no changes are required to the specialist recommendations and/or mitigation measures provided in the EMPr which was submitted along with the FEIAr dated 20 January 2017.

However, some generic recommendations and/or conditions have been included in the EMPr which was submitted as part of the FEIAr dated 20 January 2017 (where required), based on comments received from OoS / Authorities during the 30-day review and comment period for the Draft EA Amendment Motivation Report.

which report-

(aa) has been subjected to a public participation process, which had been agreed to be the DEA, and which was appropriate to bring the proposed change to the attention of potential and registered I&APs, including organs of state, which have jurisdiction in respect of any aspect of the relevant activity, and the competent authority.

A 30-day review and comment period for the Draft EA Amendment Motivation Report was undertaken in line with the requirements of the legislation. The Draft EA Amendment Motivation Report was made available to the public for review and comment from Monday 03 June 2019 to Friday 05 July 2019. All potential and registered I&APs as well as OoS / Authorities were notified of the availability of the report for review and comment accordingly. In addition, all OoS / Authorities were contacted before the end of the 30-day review and comment period as a reminder to submit comments on the

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Draft EA Amendment Motivation Report (refer to **Section 6.3**).

Refer to **Section 6** for details regarding the Public Participation Process undertaken. All Public Participation relate documents have also been provided in **Appendix C**.

(bb) which report reflects the incorporation of comments received, including any comments of the competent authority.

Correspondence received from the DEA on the Application for Amendment of the EA dated 9 May 2019 as well as the Draft EA Amendment Motivation Report has been included accordingly within this report (refer to Appendix B). All comments received on the Draft EA Amendment Motivation Report during the 30-day comment and review period were captured and responded to in the Comments and Response Report (C&RR) -**Appendix C5**. All comments received throughout the EA amendment process were incorporated into the Final EA Amendment Motivation Report and the EMPr which was submitted as part of the FEIAr dated 20 January 2017 was updated accordingly based on generic recommendations received from OoS / Authorities. The Final Amendment Motivation Report (including all appendices) was submitted to the competent authority for decision-making on 15 July 2019.

Refer to **Section 6** for details regarding the Public Participation Process. All Public Participation relate documents have been provided in **Appendix C**.

The Draft EA Amendment Motivation Report was made available for public review and comment for a period of 30 days in terms of the standard requirements by the competent authority (namely the DEA) in-line with legislation (refer to **Appendix B**). The Draft EA Amendment Motivation Report was made available to the public for review and comment on SiVEST's website (http://www.sivest.co.za/, click on Downloads, then browse to the folder '15499 Aletta WEF Amendment') from **Monday 03 June 2019** to **Friday 05 July 2019** (end of business day).

1.1 Authority Consultation

The National Department of Environmental Affairs (DEA) is the determining authority on this EA Amendment application. The following consultation has taken place with the DEA to date:

- An application to amend the EA according to the proposed amendments was submitted to the DEA on 11 April 2019.
- The Department acknowledged having received the application on 11 April 2019 and assigned the following reference number for the amendment process: 14/12/16/3/3/2/945/AM1.
- Following the review of the application for amendment of the EA, the DEA concluded that the proposed amendments are considered a change of scope. The application therefore falls within the ambit of amendments to be applied for in terms of Part 2 of Chapter 5 of the EIA Regulations, 2014 (as amended). In light of this, the EAP was referred to regulation 32 of GN R. 982
- The Draft EA Amendment Motivation Report was submitted to the DEA on 03 June 2019 and the Department confirmed receipt of the Draft EA Amendment Motivation Report on 12 June 2019.
- Comments on the Draft EA Amendment Motivation Report were received on 28 June 2019.

As part of the comments on the Draft EA Amendment Motivation Report which was sent by the DEA, it was requested that certain information be submitted with the Final EA Amendment Motivation Report. The table below provides details as to how this Final EA Amendment Motivation Report fulfils the main information requested by the DEA in the Draft EA Amendment Motivation Report comment letter. For further details, refer to **Appendix B** for the Draft EA Amendment Motivation Report comment letter.

Table 2: Compliance with DEA requirements detailed in Draft EA Amendment Motivation report comment letter

The following information must be submitted with the Final Amendment Report:

- A list of registered interested and affected parties as per Regulation 42 of the NEMA EIA Regulations, 2014, as amended;
- Please ensure that copies of original comments received from I&APs and organs of state, which have jurisdiction in respect of the proposed activity are submitted to the Department with the final Amendment Report. Kindly ensure that the Square Kilometer Array (SKA) comments are included in the document;
- Proof of correspondence with the various stakeholders, including organs of state which have jurisdiction in respect of the proposed activity, must be included in the final Amendment Report. Should you be unable to obtain such comments, proof

- A list of registered interested and/or affected parties (I&APs), stakeholders and Organs of State (OoS) / Authorities, as per Regulation 42 of the NEMA EIA Regulations, 2014 (as amended), has been provided in **Appendix C3** of this Final EA Amendment Motivation Report.
- 2. Copies of original comments received from I&APs, key stakeholders and OoS / Authorities, which have jurisdiction in respect of the proposed activity, have been submitted to the Department with the Final EΑ Amendment Motivation Report accordingly. These are provided in **Appendix** C4. Additionally, consultation and/or correspondence with the DEA is provided in **Appendix B**.

It should be noted that comments with regards to the Square Kilometer Array

- should be submitted to the Department of the attempts that were made to obtain the comments;
- 4. All issues raised and comments received during the circulation of the draft Amendment Report from I&APs and organs of state which have jurisdiction in respect of the proposed activity are adequately addressed in the final Amendment Report, including comments from this Department, and must be incorporated into a Comments and Response Report; and
- Please refrain from summarising comments made by I&APs. All comments from I&APs must be copied verbatim and responded to clearly. Please note that a response such as "noted" is not regarded as an adequate response to an I&AP's comments.
- (SKA) were sought from the South African Radio Astronomy Observatory (SARAO), as this organisation is responsible for managing all radio astronomy initiatives and facilities in South Africa. They were contacted via telephone on 11 July 2019 in order to confirm this. SKA were however also included in the public participation process and were requested to provide comments on the proposed amendments (refer to **Appendix C3** for I&AP database). All comments received with regards to the SKA have been included in **Appendix C4**.
- 3. Proof of correspondence with the various stakeholders, including OoS / Authorities which have jurisdiction in respect of the proposed activity, has been included in Appendix C4 of the Final EA Amendment Motivation Report. Additionally, all consultation and/or correspondence with the DEA is provided in Appendix B. Where the EAP was unable to obtain comments, proof of the attempts that were made to obtain comments has been provided (please refer to Table 7 in Section 6.8).
- 4. All issues raised and comments received during the circulation of the Draft EA Amendment Motivation Report from I&APs, key stakeholders and OoS / Authorities which have jurisdiction in respect of the proposed activity have been incorporated into the Comments and Response Report (C&RR), which is provided in Appendix C5 of this report, and responded to where required; and
- The EAP has refrained from summarising comments made by I&APs, key stakeholders and OoS / Authorities. All

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	comments from I&APs key stakeholders
	and OoS / Authorities have been copied
	verbatim and responded to clearly (refer to
	C&RR provided in Appendix C5). All
	comments received throughout the EA
	amendment process have been provided
	in Appendix C4 .
(b) General	
You are requested to submit one (1) unprotected	The EAP will submit one (1) unprotected
electronic copy (1 CD/DVD/USB) and one (1) hard copy	electronic copy (via CD/USB) and one (1) hard
of the final Amendment Report to the Department.	copy of the Final EA Amendment Motivation
Please ensure that this copy contains an electronic	Report to the Department. The EAP has
version of the amendment application form.	ensured that an electronic version of the
	amendment application form is also provided.
You are also advised to comply with the requirements	The Department's comment is duly noted. All
of the Regulations 32 of the EIA Regulations 2014, as	requirements of Regulation 32 of the EIA
amended.	Regulations, 2014 (as amended), have been
	complied with.
Further note that in terms of Regulation 45 of the EIA	The Department's comment is duly noted. The
Regulations 2014, this application will lapse if the	EAP has ensured that the timeframes
applicant fails to meet any of the timeframes prescribed	prescribed in terms of Regulation 45 of the EIA
in terms of the these Regulations, unless an extension	Regulations, 2014 (as amended), have been
has been granted in terms of Regulation 3(7).	met.
You are hereby reminded of Section 24F of the National	The Department's comment is duly noted. No
Environmental Management Act, Act No 107 of 1998,	activity will commence prior to an
as amended, that no activity may commence prior to an	environmental authorisation being granted by
environmental authorisation being granted by the	the Department.
Department.	

A record of all authority consultation is included within **Appendix B**.

1.2 Project Location and Layout

The proposed project is located within the Northern Cape Province. It falls within the Siyathemba Local Municipality of the Pixley ka Seme District Municipality. The proposed project is located approximately 20km east of Copperton. The WEF project includes the following farms:

- Portion 1 of Drielings Pan No.101
- Portion 2 of Drielings Pan No.101
- Portion 3 of Drielings Pan No.101
- Remainder of Drielings Pan No.101

The layout assessed in the FEIAr and indicated in the figure below will remain unchanged.

BIOTHERM ENERGY (PTY) LTD

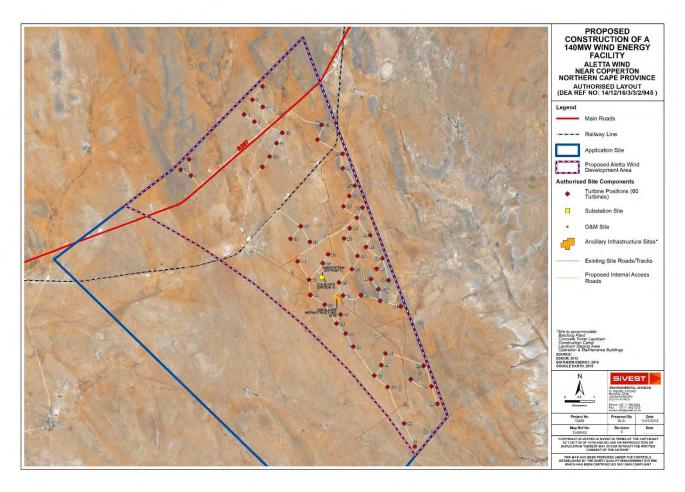


Figure 1: Layout Assessed in FEIAr

1.3 Reason for the EA Amendment

As mentioned, the EIA process and associated specialist studies considered the impacts of turbines with maximum hub heights of 120m and with maximum rotor diameters of 150m. In addition, a Path Loss and Risk Assessment, including an ECP, was undertaken to assess the impact of the proposed WEF on the SKA. This assessment and the ECP related to a specific turbine available for consideration at the time, this being the Acciona AW 125 TH 100A, with a hub height of 100m and a rotor diameter of 125m. The DEA, however, reduced the authorised turbine specifications based on the provided Path Loss and Risk Assessment and ECP, which was based on the Acciona AW 125 TH 100A (Fouché, C., 2016). BioTherm is now proposing a larger turbine for the proposed development, namely the Acciona AW 140/3465 TH 120 with a hub height of 120m and a rotor diameter of 140m, and thus the EA dated 09 May 2017 needs to be amended to allow for increased turbine dimensions. The higher hub height takes advantage of the high wind shear on site which increases the wind speeds available. In addition, the larger rotor diameter means that the turbines can capture more of the energy in the wind.

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1.4 Expertise of Environmental Assessment Practitioner (EAP)

SiVEST Environmental Division has considerable experience in the undertaking of EIA and Amendment Application processes. Staff and specialists who were involved in this Amendment Application process and contributed to the compilation of this report are detailed in **Table 3** below.

Table 3: Project Team

Name and Organisation	Role
Andrea Gibb – SiVEST SA (Pty) Ltd	Project Coordinator and Environmental Assessment
	Practitioner (EAP)
Stephan Jacobs - SiVEST SA (Pty) Ltd	Environmental Consultant
Kerry Schwartz – SiVEST SA (Pty) Ltd	GIS and Mapping
Hlengiwe Ntuli – SiVEST SA (Pty) Ltd	Public Participation Consultant
Callie Fouché – Interference Testing and	Electromagnetic Interference Path Loss and Risk
Consultancy Services (Pty) Ltd (ITC)	Assessment (Including Emission Control Plan)

As per the requirements of the EIA Regulations 2014, as amended, the details and level of expertise of the persons who prepared the EA Amendment Motivation Report are provided in **Table 4** below.

Table 4: Expertise of the EAP

Environmental	Andrea Gibb		
Practitioner			
Contact Details	andreag@sivest.co.za		
Qualifications	B.Sc. Landscape Architecture and BSc (Hons) Environmental Management		
Professional	IAIA (International Association for Impact Assessment)		
Affiliations	, , , , , , , , , , , , , , , , , , ,		
	Andrea has 11 years' work experience and specialises in undertaking and managing		
Environmental Impact Assessments (EIAs) and Basic Assessment (BA			
Expertise	related to energy generation and electrical distribution projects. She has extensive		
Lapertise	experience in overseeing public participation and stakeholder engagement		
	processes and has been involved in environmental baseline assessments, fatal fla		
	/ feasibility assessments and environmental negative mapping / sensitivity analyses.		
Environmental	Stephan Jacobs		
Consultant			
Contact Details	stephanj@sivest.co.za		
Qualifications	B.Sc. Environmental Sciences and B.Sc. (Hons) Environmental Management and		
	Analysis		
Professional	IAIA (International Association for Impact Association (in		
Affiliations	IAIA (International Association for Impact Assessment)		
Expertise	Stephan joined SiVEST in May 2015 and holds the position of Graduate		
	Environmental Consultant in the Johannesburg office. Stephan specialises in the		
	field of Environmental Management and has been involved in the compilation of		

Environmental Impact Assessments (EIAs) and Basic Assessments (BAs). Stephan
has also assisted extensively in the undertaking of field work and the compilation of
reports for specialist studies such as surface water and visual impact assessments.
Stephan also has experience in Environmental Compliance and Auditing and has
acted as an Environmental Control Officer (ECO) for several infrastructure projects.

Please refer to **Appendix G** for CV's of each team member.

2 PROPOSED AMENDMENTS

As mentioned, BioTherm is proposing a larger turbine for the proposed development, namely the Acciona AW 140/3465 TH 120 with a hub height of 120m and a rotor diameter of 140m. The amendments to the EA which are now being requested include the following:

Page 8:

FROM:

• 60 wind turbines with a total output of 140MW. Turbines will have a hub height of 100m, a rotor diameter of 125m and a generation output of 3MW each.

<u>TO</u>:

• 60 wind turbines with a total output of 140MW. Turbines will have a hub height of 120m, a rotor diameter of 140m and a generation output of 3.465MW each.

Page 9 (Technical details of the proposed facility):

FROM:

Component	Description / Dimensions
Hub height from ground level	100m
Rotor diameter	125m

TO:

Component	Description / Dimensions
Hub height from ground level	120m
Rotor diameter	140m

Page 9 (Scope of authorisation No. 2):

FROM:

2. Only a wind turbine generator with the following specifications are authorised: An Acciona AW 125 TH 100A with a 100m hub height, 125m rotor diameter and a 3MW output.

<u>TO:</u>

2. Only a wind turbine generator with the following specifications are authorised: An Acciona AW 140/3465 TH 120 with a 120m hub height, 140m rotor diameter and a 3.465MW output.

■ Page 17 (Turbine position No. 37):

FROM:

37. Only a wind turbine generator with the following specifications are authorised: An Acciona AW 125 TH 100A with a 100m hub height, 125m rotor diameter and a 3MW output.

TO:

37. Only a wind turbine generator with the following specifications are authorised: An Acciona AW 140/3465 TH 120 with a 120m hub height, 140m rotor diameter and a 3.465MW output.

Page 28 (Findings):

FROM:

e) Only a wind turbine generator with the following specifications are authorised: An Acciona AW 125 TH 100A with a 100m hub height, 125m rotor diameter and a 3MW output.

<u>TO</u>:

e) Only a wind turbine generator with the following specifications are authorised: An Acciona AW 140/3465 TH 120 with a 120m hub height, 140m rotor diameter and a 3.465MW output.

3 ASSESSMENT OF ENVIRONMENTAL IMPACTS

As part of the original EIA process for the proposed 140MW Aletta WEF and its associated infrastructure undertaken in 2017 (DEA Ref No.: 14/12/16/3/3/2/945), the following specialist studies were undertaken:

- Biodiversity Assessment;
- Avifauna Assessment (including pre-construction monitoring);
- Bat Assessment (including pre-construction monitoring);
- Surface Water Impact Assessment;
- Soils and Agricultural Potential Assessment;
- Noise Assessment;
- Visual Impact Assessment;
- Heritage and Palaeontology Assessment;
- Socio-economic Impact Assessment;
- Traffic Assessment; and

Electromagnetic Interference Path Loss and Risk Assessment (Including Emission Control Plan).

It should be noted that the EIA process and above-mentioned associated specialist studies considered the impacts of turbines with maximum hub heights of 120m and with maximum rotor diameters of 150m. As the proposed WEF is located within the declared Karoo Central Astronomy Advantage Area, a Path Loss and Risk Assessment, including an ECP, was undertaken to assess the impact of the proposed WEF on the SKA. This assessment and the ECP related to a specific turbine available for consideration at the time, this being the Acciona AW 125 TH 100A, with a hub height of 100m and a rotor diameter of 125m.

The proposed turbine specifications are still in-line with the specialist assessments undertaken for the WEF and findings set out in the Final Environmental Impact Assessment Report (FEIAr) dated 20 January 2017. As such, apart from the Path Loss and Risk Assessment, no further assessment was required and a summary of the specialist findings which were undertaken as part of the EIA process for the proposed 140MW Aletta WEF and its associated infrastructure is provided in **Table 5** below.

Table 5: Summary of findings from EIA process

Environmental	Summary of major findings	
Parameter		
Biodiversity	The vegetation types that occur within the region (Bushmanland Arid Grassland, Lower Gariep Broken Veld and Bushmanland Vloere and possibly floristic elements of Bushmanland Basin Shrubland and Northern Upper Karoo) are classified as Least Threatened and also have a wide distribution and extent. The natural vegetation on the sites is therefore not considered to have high conservation status. The area is not within a Centre of Plant Endemism or in areas identified in Provincial Conservation Plans to be of concern, but it does occur within an area identified as part of the National Parks Area Expansion Strategy.	
	Local factors that may lead to parts of the sites having elevated ecological sensitivity are the potential presence of the following:	
	 Presence of natural vegetation on site, although of low conservation priority. Presence of a number of provincially protected plant species. Presence of a number of individuals of one protected tree species, <i>Boscia albitrunca</i>. 	
	 Presence of drainage areas and pans. Presence of low, rocky hills with higher biodiversity than surrounding areas. Potential presence of the following animals of potential conservation concern: Honey badger (NT) Littledale's Whistling Rat (NT) 	
	 Giant Bullfrog (NT/LC) Potential invasion of natural habitats by alien invasive plants, thus causing additional impacts on biodiversity features. 	
	Cumulative impacts of this project in combination with similar projects is likely to be of low significance.	
	The two (2) proposed sites for the combination of on-site substation and operation & maintenance (O&M) building were evaluated and both sites were found to be favourable. No significant features of concern were found at either site.	
Avifauna	The proposed BioTherm Aletta (Copperton) Wind Farm will have a variety of impacts on avifauna which range from low to high. The impacts are (1) displacement of priority species due to disturbance during construction phase (2) displacement of priority species due to habitat destruction during construction phase (3) displacement of priority species due to disturbance during operational phase (4) and collisions of priority species with the turbines in the operational phase.	

Displacement of priority species due to disturbance during construction phase is likely to be a temporary medium negative impact, but can be reduced to low with the application of mitigation measures. Mitigation measures are the restriction of construction activities to the construction footprint area, no access to the remainder of the property during the construction period, measures to control noise and dust, maximum use of existing access roads, the implementation of a 3km no development buffer zone around a Verreaux's Eagle nest, and a 300m no development buffer zone around a Southern Pale Chanting Goshawk nest.

Displacement of priority species due to habitat destruction during construction phase is likely to be a medium negative impact and will remain so, despite the application of mitigation measures. Mitigation measures comprise strict adherence to the recommendations of the specialist ecological study and maximum use of existing access roads with the construction of new roads kept to a minimum.

Displacement of priority species due to disturbance during the operational phase is likely to be of low significance and it could be further reduced through the application of mitigation measures. Mitigation measures are the restriction of operational activities to the plant area, no access to other parts of the property unless it is necessary for wind farm related work, post-construction monitoring, and if densities of key priority species are proven to be significantly reduced due to the operation of the wind farm, engagement of the wind farm management to devise ways of reducing the impact on these species.

Collisions of priority species with the turbines in the operational phase are likely to be a high negative impact but it could be reduced to medium negative through the application of mitigation measures. Mitigation measures are the implementation of post-construction monitoring and, if actual collision rates indicate high mortality levels, curtailment of selective turbines. Lastly, the implementation of a 3km no development buffer zone around a Verreaux's Eagle nest, a 200m no turbine zone around water points and a 300m no development buffer zone around a Southern Pale Chanting Goshawk nest are recommended.

Finally, it is concluded that, after taking into account the expected impact of proposed renewable energy projects within a 35km radius around Kronos MTS, that the cumulative impact of the proposed Aletta WEF on priority avifauna, after appropriate mitigation has been implemented, will range from minor to insignificant.

The impacts of the proposed Aletta WEF on priority avifauna could be mitigated to acceptable levels, therefore the development could proceed provided that mitigation measures are strictly implemented.

Bats

The site was first visited in July 2015 wherein two SM2BAT+ detectors were installed on one 10m mast, and one meteorological mast. The long-term monitoring study aims to identify bat species at risk of fatality to wind turbines, and patterns in their activity and distributions (temporal and spatial).

A sensitivity map was drawn up indicating potential roosting and foraging habitat. The turbine layout is respective of the bat sensitivity map is deemed acceptable with regards to the bat monitoring study since no turbines are encroaching on any sensitive area.

Four bat species were detected namely, *Tadarida aegyptiaca*, *Neoromicia capensis*, *Miniopterus natalensis*, and *Eptesicus hottentotus*. *Neoromicia capensis* and *Tadarida aegyptiaca* were most commonly detected across both of the monitoring systems. The migratory species, *Miniopterus natalensis*, was detected by all monitoring systems and is rather prevalent on site. The relative abundance of this species was highest, as detected by all monitoring systems, over the months of September - October 2015 and February - April 2016.

Surface Water

Ultimately, it was found that there were nine (9) watercourses (drainage lines) and twenty-two (22) depressions (depression wetlands). For the depression wetlands, these were sub-divided into two sub-categories for the fifteen (15) natural depression wetlands and the seven (7) artificial (man-made) depression wetlands identified. A buffer zone of 50m for watercourses and the natural depression wetlands have been applied in consideration of the factors above. No buffer zone was applied to the artificial depression wetlands as these were not identified to be of any major ecological significance. The artificial depression wetlands would however need to be avoided and should be viewed as exclusion zones.

In the context of NEMA (1998) and the EIA Regulations (2014), considering the layout of the proposed development, no listed activities will be triggered based on the wind turbine, substation and operation and maintenance building facility layout since none of these structures are directly within or within close proximity (within 32m) to the identified surface water resources. However, it is presumed that internal access roads will be required which will need to route to the respective wind turbines locations and various buildings and infrastructure to be constructed. Since the drainage lines can extend for some kilometres and the distribution of the wetlands are amongst the wind turbine locations, there is a good chance the internal access roads and other associated infrastructure not shown on the current layout will need to cross or be within close proximity to the delineated surface water resources. Therefore, provisionally, Activities 12 and 19 of Government Notice 983 Listing Notice 1 are identified to potentially be triggered thereby requiring Environmental Authorisation.

In the context of the NWA (1998) and the proposed development, a "water use" is required where construction activities will impact on a water resource. As such, for the proposed development, since there is no anticipated direct impact or any potential indirect impact based on the current wind turbine, substation and operation and building layout, it is anticipated that no water uses will be triggered. However, as stated in above, it is anticipated the internal roads and other associated infrastructure not displayed on the current layout may need to cross or be within 500m of the identified wetlands and / or watercourses thereby triggering water uses (c) and (i). The application of these water uses can however only be confirmed once the internal road layout is available.

It was identified that several potential impacts may affect the surface water resources within the proposed development area during the pre-construction, construction, operation and decommissioning phases. It is not anticipated that the proposed development will need to be decommissioned. Should this need to take place, the same impacts as identified for the construction phase of the proposed development can be anticipated. Hence, the same impacts are expected to occur and the stipulated mitigation measures where relevant must be employed to minimise impacts.

Potential cumulative impacts were assessed given that numerous proposed and currently constructed renewable energy developments can be found in the surrounding area. As such, the direct cumulative impact of loss of surface water resources and degradation was found not to be compounded by the proposed development as the wind turbine, substation and operation and maintenance buildings were not located in any surface water resources. However, provision for potential degradation of surface water resources due to associated infrastructure was noted. Should these potential impacts be avoided / reduced as per the mitigation measures stipulated, the cumulative impact will be negligible. From an indirect cumulative impact perspective, the proposed development as a whole was not expected to contribute to the cumulative impacts of increased run-off, sedimentation and erosion since the drainage lines flow in a southerly direction and will be contained on the proposed development area, and not into any adjacent proposed or current renewable energy developments being constructed. That being said, with the implementation of stipulated mitigation measures, the cumulative impact was again deemed to be negligible.

Soils and Agricultural Potential

The agricultural potential for this area corresponds with the initial findings in the scoping report. Thus, an overall low potential for irrigation for map units Cg1, Cg2, Py1 with a low to moderate irrigation potential for map unit Py2, consisting of gravelly Plooysburg and Hutton soils, with soil depth 300-800 mm onto rock.

Virtually all of the study area comprises shallow, often calcareous soils with rock outcrops.

Coupled with these shallow soils, the very low rainfall in the area means that the only means of cultivation would be by irrigation and the Google Earth image of the area shows absolutely no signs of any agricultural infrastructure and certainly none of irrigation.

The climatic restrictions mean that this part of the Northern Cape is suited at best for grazing and here the grazing capacity is low, around 20 ha/large stock unit (ARC-ISCW, 2004).

Two main impacts are possible. The first deals with the unavailability of land for agriculture due to the fact that a wind energy generating facility is to be established, while the second impact refers to the possibility that construction of such a facility will lead to disturbance of the topsoil and surface vegetation cover, so that erosion of topsoil by wind action will increase.

There are a considerable number of other power generation projects proposed for the immediate area near Copperton and Prieska. The prevailing agricultural potential is low to very low, so there will be little or no cumulative impact in that regard. However, regarding wind erosion, there is a definite possible cumulative impact regarding potential topsoil removal by wind erosion on one site, which could then be blown for a considerable distance across other sites.

Two potential sites were proposed regarding positions of the substation and other infrastructure. However, there are no sensitive areas in the study area and the natural resources are very similar, so there will be no specific difference between the two sites.

Due to the occurrence of shallow soils, coupled with the extremely hot and dry nature of the climate, there are no significant impacts from the project.

Noise

The results of the investigation indicated that the predicted impact of noise during construction phase would be confined to residences within the WEF boundaries. There would be a temporary loss of "quiet" low residual noise level with a **high** intensity of noise impact on the residences at location L2 during daytime if the existing access farm road in close proximity to the residences were to be upgraded. Construction of a new road and site works at least 1 000 m from the residences would reduce the impact to **Low**.

Based on the wind energy turbine noise emission data provided, assessment of the predicted noise during the operation phase in terms of SANS 10103:2008 indicated that the intensity of noise impact on land adjacent to the WEF boundaries would range from **Very High** close to the boundaries to **Low** at a distance of 2 600 m.

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The intensity of noise impact on residences within the WEF boundaries at location L2 would be **High**. At residences at locations L3 and L4, at a distance of 3 100 m beyond the WEF boundaries, the intensity of noise impact would be **Low** and **Negligible**, respectively.

In terms of the National Noise Control Regulations (NCR), noise emanating from the wind energy turbines would be adjudicated as disturbing noise on land within 2 600 m from the northern, eastern and southern boundaries. Compliance with the legal requirements of the NCR would require all turbines to be set back 2 600 m from the WEF boundaries.

In terms of SANS 10103:2008 the intensity of noise impact on adjacent land close to the boundaries would be **Medium**.

Visual

The impact assessment revealed that the proposed development would have a negative low visual impact during construction and a negative medium visual impact during operation, with several mitigation measures available to reduce the visual impact.

The visual impacts are not significant enough to prevent the project from proceeding and an EA should be granted. From a visual impact perspective, only two (2) visually sensitive receptors with tourism significance have been identified within the study area, namely the Boesmansberg Guest Farm (VR 1) and the Nelspoortjie Karoo Guest Farm (VR 2). In addition, the existing electrical infrastructure and other linear elements already present within the study area have already altered the natural character of the surrounding environment to a degree and are expected to lower the visual contrast of the Aletta Wind Energy Facility slightly. The visual impact of the proposed development on most the potentially sensitive visual receptors identified within the study area was rated as being low or medium. In addition, the proposed development would have a negligible visual impact on one (1) potentially sensitive visual receptor, while a high visual impact will be experienced by three (3) potentially sensitive visual receptor locations. SiVEST is therefore of the opinion that the impacts associated with the construction and operation phases can be mitigated to acceptable levels provided the recommended mitigation measures are implemented.

Heritage and Palaeontology (Desktop)

Heritage Impact Assessment:

The Heritage Scoping Report completed in February 2016 has shown that the proposed Aletta site to be developed as a Wind Energy Facility (WEF) may have heritage resources present on the property. This has been confirmed through archival research and evaluation of aerial photography of the sites.

The subsequent field work completed for the HIA component in August 2016, has confirmed the presence of 3 archaeological find spots, 5 historical sites, 21

archaeological sites or resources and 3 grave sites. The archaeological sites are associated with the Early Stone Age (ESA), Middle (MSA) and Later Stone Age (LSA) and are representative of archaeological sites with a medium to high significance.

The design process and methodology followed by the developer for this project enabled the heritage assessment to provide input into the proposed layouts before the impact assessment. This resulted in cognisance being taken of the positions of the heritage sites and thus the reduction of impacts at an early design phase.

The comparative assessment of the alternatives has shown that an overall low impact on heritage is foreseen, as all of the heritage sites identified fall outside the proposed alternative foot prints. The application site however holds a Negative Medium Impact.

Allowing for a 60m diameter construction foot print for on all turbine positions has shown that all the find spots and sites fall outside and in most case more than 100 meters away from any construction activities.

One archaeological resource occurs at the option 2 substation (Rated as having low heritage significance). Substation and O&M Building Option 1 is thus the preferred alternative from a heritage perspective as no heritage resources has been identified in the general area of the substation footprint.

It is the specialist's considered opinion that this additional load on the overall impact on heritage resources will be low. With a detailed and comprehensive regional dataset this rating could possibly be adjusted and more accurate.

It can clearly be noted that the area in general is abundant with Stone Age remains. I concur with Kaplan and Wiltshire 2011, "SAHRA must assess this application in the broader context of other present and future applications in the area in order to guide the Client and the Department of Environmental Affairs (DEA) towards an acceptable level of overall heritage impact on the area."

Palaeontological Desktop Assessment:

The Desktop Paleontological Survey Identified that the proposed development is allocated a Moderate Paleontological Sensitivity. Geological structures associated with groundwater were mapped as well as spring sites which are part of the Heritage of this area.

The study area is underlain by presumably Mokolian aged Uitdraai Formation of the Brulpan Group Olifantshoek Supergroup, Carboniferous to Permian aged Dwyka Group, Karoo Supergroup and Quaternary aged Gordonia Formation of the Kalahari Group.

The allocation of a Moderate sensitivity for Paleontological Heritage to the entire study area except the two historic spring sites, which indicate Very High point sources of Groundwater Heritage.

Although the Uitdraai Formation can provide new information on micro-fossils of Mokolian age, these fossils are very difficult to identify and are more of academic interest. Both the Dwyka Group and Gordonia Formations are however known for some very significant fossil finds and although scarce, the fossils can contribute significantly to our understanding of depositional environments during the Carboniferous, Permain and Quaternary ages in South Africa.

Socio-economic

The economy of the Siyathemba LM is in need of investment and development and the establishment of the wind facility in the area will offer such an opportunity. Furthermore, if the other proposed projects are approved, this could contribute to the growth of this sector as well as stimulate economic development further. The project will have the potential to improve the standard of living of the communities located within a 50 km radius given the commitments towards socio-economic and enterprise development.

The construction and operation of the facility will result in various positive economic impacts.

- It is estimated that the capital expenditure on the 140 MW wind facility will be R2.6 billion. Approximately, 128 employment opportunities will be created during the construction phase at peak construction. About 40% of the employment opportunities, specifically for unskilled and semi-skilled individuals are likely to be available to local community members. Employment opportunities for skilled individuals are likely to be associated with contractors appointed during the construction phase.
- The annual revenue generated by the plant could amount to up to R1.3 billion. Furthermore, it is expected that 39 jobs per annum will be created at the plant.

Overall, the impacts discussion and evaluation revealed that no fatal flaws are present from a socio-economic perspective, preventing the proposed development from being approved and implemented. In fact, all of the expected negative socio-economic impacts are of low significance.

Electromagnetic Interference Path Loss and Risk

This risk assessment would enable one to estimate the maximum permissible radiated emissions from the equipment installed within the Aletta wind energy facility and will be compared to known radiated emission data from the Acciona AW125/3000 Wind Turbine Generator (WTG). Acciona AW125/3000 WTG is a large turbine type and was used to show the typical impacts of a similar technology and sized turbine. The assessment and Electromagnetic Control Plan addresses mitigation actions required to reduce the radiated emissions of the AW 125 TH 100A WTG to levels

acceptable for installation within the declared Karoo Central Astronomy Advantage Area. The intent of this plan is thus to ensure that the proposed Aletta wind energy facility poses a low risk of detrimental impact on the SKA by describing specific mitigation measurements to be implemented in order to achieve 40 dB of attenuation, as agreed with SKA South Africa. In addition, this plan concerns itself with the goal of eliminating causes of electromagnetic interference (EMI), which can adversely affect the performance of the SKA Radio telescope.

The current Electromagnetic Compatibility (EMC) requirement is a 30dB reduction in radiated emissions to ensure the cumulative emission level of a wind farm is within the requirements of SKA. This requirement is based on measurements on the Acciona AW 125 TH100A WTG at the Gouda facility in South Africa and Barosoain windfarm, Navarra, Spain. Very similar design will be used for the Copperton / Garob facilities.

To prevent an impact on the SKA Project, Biotherm Energy has reviewed the facility lay-out to increase the distance from the closest turbine to the closest SKA infrastructure from 20km to 25km. The number of turbines has also been reduced from the initial 125 turbines to 60 turbines.

As mitigation techniques are source and coupling path specific, tests were done on a current WTG to confirm the suspected noise sources. The results indicated shielding required at frequencies in the FM Radio band as well as other controlled frequency bands, especially in the nacelle area.

With regards to the Convertor Cabinet, test results obtained at the current installation including a 10dB safety margin shows no additional attenuation is required. Adding a 17.8dB requirement to accommodate cumulative effect highlighted a few frequencies that will require additional attenuation. Further analysis of the frequencies above the 0dB line proved that they are ambient frequencies in the FM, TV and cell phone band. The shielding effectiveness of the concrete tower was not taken into account. No additional shielding of the bottom converter cabinet would therefore be required.

With regards to the Bottom Control Cabinet, test results obtained at the current installation including a 10dB safety margin shows that no additional attenuation is required. Adding a 17.8dB requirement to accommodate cumulative effect, highlighted the frequencies that will require additional attenuation of 12dB maximum excluding the FM radio frequencies. Further analysis of these signals proved that they are ambient signals from intentional transmitters. No additional shielding of the bottom control cabinet would therefore be required.

With regards to the Top Control Cabinet, when taking cumulative effect into consideration, a significant amount of shielding is required. This is the combined effect of the cables entering and exiting the Top Control Cabinet and equipment mounted in the cabinet. Further analysis of the highest peaks revealed that they can be attributed to FM radio stations, TV and GSM intentional transmitters. However, not all signals that require attenuation could be attributed to intentional transmitters. Mitigation should include shielded cabinets, shielded cable trays and the use of absorptive cable sleeves.

Laboratory tests will be done to narrow down the source possibilities.

Although site measurements were done, there is always the risk of interference signals (A) being masked by a higher amplitude interference signal (B). Signal A will then only become apparent once signal B has been mitigated. As the wind turbine generator and control equipment is a matured design, mitigation will be limited to non-invasive techniques.

Traffic

As part of the traffic assessment haulage routes were compared. Route Alternative 1 and Route Alternative 4 were deemed to be the preferred options. Route Alternative 1 avoids the Van Rhyns Pass and the Piekenierskloof Pass, however, there is a railway bridge on the N7 (located approximately 42km southeast of the town of Nuwerus) which may be a possible obstruction. As such, Route Alternative 4 was deemed to be the preferred option as it doesn't have any gravel roads and is much shorter than the other alternatives.

Based on the available information, it was calculated that the development will generate 6845 trips over an 18-month period. It was assumed that two (2) turbines will be delivered to site each week which roughly equates to three (3) deliveries per day. Fifteen normal heavy and light vehicles will also travel to and from site daily but, over a much shorter distance.

Access to the site will be via an existing gravel track off the R357, which is currently the farmer's access road, approximately 34km from the N10 intersection. Sight distance at the access is more than adequate and the pavement structure seems to be sound and with little to no defects.

It is expected that the community of Prieska will participate in the construction phase of this development. From a traffic point of view, the total daily construction traffic is deemed to be very low and will not significantly impact this community. The cumulative effect on the community was rated as a positive low impact.

The impact of the construction traffic on the general traffic and the surrounding communities along the haulage route is considered to be low. The level of service on

the roadways on which the components are transported may experience some additional delay.

All the components will be transported by truck from Saldanha or Coega harbour to the site using the defined routes with possible minor deviations. These vehicles are classified as oversize vehicles and permits must be obtained in order to transport the turbine components.

The access to the site is on road R357 which is a Provincial road and will necessitate the involvement of the Northern Cape provincial roads and transport department.

The cumulative impact and significance of the development of the wind energy farm is considered to be low negative and low positive impacts when traffic and surrounding community parameters, respectively, are examined.

Following the conclusion of the EIA process, BioTherm was subsequently issued with an EA for the proposed development on 09 May 2017 (DEA Ref No.: 14/12/16/3/3/2/945). As mentioned, the EIA process and associated specialist studies considered the impacts of turbines with maximum hub heights of 120m and with maximum rotor diameters of 150m. The DEA, however, reduced the authorised turbine specifications based on the provided Path Loss and Risk Assessment and ECP, which was based on the Acciona AW 125 TH 100A (Fouché, C., 2016). The turbine specifications set-out in the EA were intended to reduce the potential risk of adverse impacts of wind turbines on the SKA.

As mentioned above, the new proposed turbine specifications are still in-line with the specialist assessments undertaken for the WEF and findings set out in the FEIAr dated 20 January 2017. The proposed change in output of each turbine from 3MW to 3.465MW will have no bearing on the specialist findings or environmental impacts as the proposed number of turbines, hub height and a rotor diameter are still in-line with the assessed turbine specifications. The proposed amendments will not result in any additional negative environmental impacts, over-and-above those already assessed in the FEIAr and authorised in the EA, and will not change the nature or scope of the project from what was assessed.

Further assessments were however conducted by the Electromagnetic Compatibility specialists (namely a Path Loss and Electrical Design Change Evaluation) and it was subsequently determined that the proposed Acciona AW 140/3465 TH 120 turbine model will not result in increased risks of electromagnetic emissions from the WEF and that no new mitigation measures will be required. Acciona confirmed that the AW 140/3465 TH 120 turbine's emissions are similar as per the Acciona AW 125 TH 100A and thus there is no need to change the ECP. This was confirmed by ITC.

The findings of the Path Loss and Electrical Design Change Evaluation are summarised in **Table 6** below and a copy is provided in **Appendix E**.

Table 6: Summary of Path Loss and Electrical Design Change Evaluation of Acciona AW 140/3465 TH 120 Wind Turbine

Environmental	Summary of major findings
Parameter	
Path Loss and Electrical Design Change Evaluation	Since drafting the Electromagnetic Control Plan (CP 6778/16) for the Aletta Wind farm in 2016, the turbine of choice for the development has changed from the Acciona Model AW3000/125 TH100 50Hz wind turbine to Acciona Model AW 140/3465 TH120.
	In order to confirm the validity of the proposed mitigation measures, the Acciona Engineering department issued a comparison between the two (2) turbine models to confirm the electrical similarity.
	The path loss calculations were repeated at a hub height of 100m and 120m to confirm the attenuation requirements and to ensure no discrepancy would arise due to location variations.
	Little impact on the path loss values was found due to the increase of the hub height from 100m to 120m except in the case of WTG 31 to SKA 1895 where the 20m height difference caused a 26dB reduction in path loss. The impact on the path loss values to the core is however less than 1.5dB.
	Although there is a 26 dB reduction in path loss due to the hub height change, the initial mitigation requirements in CP 6778/16 was based on a minimum path loss of 134dB @ 6GHz whereas the reduced path loss of WTG 31 to SKA 1895 is still 136dB (2dB more than the previous minimum).
	According to the design change statement from Acciona (Appendix A of Path Loss and Electrical Design Change Evaluation), there is no foreseen risk of increasing the electromagnetic emissions of the WEF that would require additional mitigation measures to be developed to fulfill the SKA requirements, notwithstanding that the Aletta WEF's control plan and path loss calculations be updated.
	In conclusion, the change in hub height and minor electrical differences between the AW125 TH100A and AW 140/3465 TH120 does not impact on the mitigation requirements as set out in the Path Loss and Risk Assessment Report for New Aletta WEF Layout Including Emission Control Plan for the AW125 TH 100A WTG (CP6778/16).

It should be noted that BioTherm sent the above-mentioned Path Loss and Electrical Design Change Evaluation to the South African Radio Astronomy Observatory (SARAO) for final review and approval upon its completion. Having assessed the proposed amendments to the turbine specifications, SARAO stated that they do not anticipate any negative impact on the SKA and that the modifications to the Aletta WEF do

not impact on the previously agreed path loss mitigation measures. Accordingly, SARAO has raised no objection to the proposed amendments.

In addition, SARAO undertook a basic desktop study during the 30-day comment and review period of the Draft EA Amendment Motivation Report and came to the conclusion that the proposed amendments do not significantly change the path loss between the facility and the nearest SKA infrastructure and as such will not impact on the previously agreed path loss mitigation requirements and emission control. Based on this, SARAO do not have any objections to the proposed amendments.

The two (2) letters from SARAO which confirm that they do not have any objections to the proposed amendments have been provided in **Appendix C4**. It should be noted that one (1) of these letters was received prior to the application submission, while the other was received during the 30-day comment and review period of the Draft EA Amendment Motivation Report.

In light of the above, no additional impacts will be associated with the proposed amendments and the environmental impacts identified in the FEIAr dated 20 January 2017 remain unchanged.

4 MITIGATION MEASURES

As mentioned, the new proposed specifications are still in-line with the specialist assessments undertaken for the WEF and findings set out in the FEIAr. The proposed change in output of each turbine from 3MW to 3.465MW will have no bearing on the specialist findings or environmental impacts as the proposed number of turbines, hub height and a rotor diameter are still in-line with the assessed turbine specifications. The proposed amendments will not result in any additional negative environmental impacts, over-and-above those already assessed in the FEIAr and authorised in the EA. As such, no new mitigation measures will be required.

In terms of the Path Loss and Electrical Design Change Evaluation (**Appendix E**) and the design change statement from Acciona (Appendix A of Path Loss and Electrical Design Change Evaluation), the change in hub height and minor electrical differences between the AW125 TH100A and AW 140/3465 TH120 does not impact on the mitigation requirements as set out in the Path Loss and Risk Assessment Report for the proposed Aletta WEF Layout Including Emission Control Plan for the AW125 TH 100A WTG (CP6778/16).

In light of the above, the mitigation measures provided by the various specialists as outlined in the FEIAr dated 20 January 2017 have not changed, and thus the specialist recommendations and/or mitigation measures provided in the EMPr which was submitted along with the FEIAr will not need to be amended and/or updated. However, some generic recommendations and/or conditions have been included in the EMPr which was submitted as part of the FEIAr dated 20 January 2017 (where required), based on comments received from OoS / Authorities during the 30-day review and comment period for the Draft EA Amendment Motivation Report. The Draft EMPr is provided in **Appendix D**.

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15 July 2019

5 NEED AND DESIRABILITY FOR THE PROPOSED AMENDMENT

As indicated in the FEIAr, the use of renewable energy technologies, as one (1) of a mix of technologies needed to meet future energy consumption requirements, is being investigated as part of South Africa's long-term strategic planning and research process. Wind energy is plentiful, renewable, widely distributed, clean and reduces greenhouse gas emissions when it displaces fossil-fuel derived from electricity. In this light, renewable wind energy can be seen as desirable.

The Renewable Energy Independent Power Producer Procurement Programme (REIPPPP) and the competitiveness nature of the bidding process has resulted in significant lowering of solar and wind tariff prices since 2011. Further projects will increase the competitive nature of the REIPPPP and result in cost savings to South African consumers. BioTherm aim to have a tariff that is very competitive within the current economic environment having taken into consideration the current exchange rates and interest rate. BioTherm Energy is a leading South African renewable energy project developer, and was the only South African developer to be operating three (2) projects from the first round of the REIPPPP, where it continues to meet its economic development obligations.

Socio-economic development and enterprise development provides undeniable value for money to Government as it helps to alleviate some of the pressure on State coffers in terms of what it can achieve at both a local and national level. BioTherm has committed to initiating its economic development activities upon the Project being selected as a Preferred Bidder.

Following the EA for the proposed development, and the proposed amendments being sought, the subsequent advantages and disadvantages are discussed in the sub-sections below.

5.1 Advantages of the Proposed Amendments

If the amendment is granted, the turbine specification conditions will allow BioTherm to take advantage of the latest, most suitable wind turbine technology available for the proposed Aletta WEF and will thus not affect the financial viability of the project nor decrease the chances of being awarded preferred bidder status in the future REIPPPP bid windows. Granting the amendment would therefore increase the possibility of the social benefits of the project being realised, such as contributing to corporate social investment, aiding the local economy and potentially creating employment opportunities in the area.

5.2 Disadvantages of the Proposed Amendments

As mentioned, the new proposed turbine specifications are still in-line with the specialist assessments undertaken for the WEF and findings set out in the FEIAr dated 20 January 2017. The proposed change in output of each turbine from 3MW to 3.465MW will have no bearing on the specialist findings or environmental impacts as the proposed number of turbines, hub height and a rotor diameter are still in-line with the assessed turbine specifications. The proposed amendments will not result in any additional negative environmental impacts, over-and-above those already assessed in the FEIAr and authorised in the EA, and will not change the nature or scope of the project from what was assessed. As such, there are

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no disadvantages associated with the proposed amendment, as all negative impact were already identified, considered and assessed in the EIA process which was undertaken for the Aletta WEF.

6 PUBLIC PARTICIPATION

The Public Participation Process has been undertaken in line with Chapter 6 of the EIA Regulations, 2014 (as amended).

The following process was undertaken as part of the Public Participation Process for the Part 2 Amendment Process:

6.1 Notification of Affected Landowners and Provincial Authority

All affected landowners, as well as the relevant provincial authority (namely the Northern Cape Department of Environment and Nature Conservation - NC DENC), were notified about the EA Amendment Application via email prior to the application being submitted to the DEA on 11 April 2019. Proof of these notifications is provided in **Appendix C6**.

Additionally, all affected landowners and the NC DENC were notified about Draft EA Amendment Motivation report which was made available for review and comment for a period of 30 days. Proof of these notifications is provided in **Appendix C1** and **Appendix C7**.

6.2 Notification of Potential Interested and Affected Parties (I&AP's)

The advertising process was followed in terms of regulation 41 of the EIA Regulations, 2014 (as amended).

Advertisements (in English and Afrikaans) were placed in the "Gemsbok" local newspaper on Wednesday the 29th of May 2019. Proof of the above-mentioned advertisements that were placed is provided in **Appendix C2**.

In addition, site notices (in English and Afrikaans) were erected on the boundary of the application site (Remainder of Drielings Pan No.101) on Friday the 31st of May 2019. A copy of the site notices which were erected is provided in **Appendix C1**. Proof of the site notices (including GPS coordinates) which were erected are also included in **Appendix C1** of this Final EA Amendment Motivation Report.

As I&APs and stakeholders responded to these advertisements, they were registered on the project database and sent all relevant information as the amendment process progressed.

6.3 Comment and Review of Draft EA Amendment Motivation Report

All I&APs and OoS / Authorities were given 30 days to comment on the Draft EA Amendment Motivation Report, which was compiled in terms of regulation 32(1)(a) of GN R. 982. The Draft EA Amendment

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Motivation Report was made available to all I&APs, key stakeholders and OoS / Authorities for comment and review on SiVEST's website (http://www.sivest.co.za/, click on Downloads, then browse to the folder '15499 Aletta WEF Amendment') for a period of 30 days, from Monday 03 June 2019 to Friday 05 July 2019, excluding public holidays. It should be noted that all the key stakeholders / OoS / authorities were sent electronic copies (on CD) of the Draft EA Amendment Motivation Report (including all appendices) during the 30-day comment and review period (see **Section 6.8**).

Written notice was given to all registered I&APs, key stakeholders and OoS / Authorities on the database that the Draft EA Amendment Motivation Report was available for comment and review (**Appendix C1**). Electronic copies (CD) of the report were also distributed on written request. All comments received throughout the EA amendment process (including comments received during the Draft EA Amendment Motivation Report's commenting period) were incorporated into the Final EA Amendment Motivation Report, which was submitted to the competent authority (namely the DEA) for decision-making on 15 July 2019. Additionally, all comments received throughout the EA amendment process were also included and addressed in the Comments and Response Report (C&RR) (**Appendix C5**).

6.4 Stakeholders and I&APs

In order to identify possible I&APs, key stakeholder and/or OoS / Authorities, use was made of:

- Email, sms, fax and post notifications to all I&APs key stakeholder and OoS / Authorities on the project database (Proofs included in Appendix C1); and
- Referrals.

A full database list of registered I&APs, key stakeholder and OoS / Authorities was compiled and is included in **Appendix C3**.

6.5 Announcing the Opportunity to Participate

The opportunity for I&APs, key stakeholder and OoS / Authorities to participate in the EA amendment process have been undertaken as follows:

- All affected landowners, as well as the relevant provincial authority (namely the Northern Cape Department of Environment and Nature Conservation - NC DENC), were notified about the EA Amendment Application via email prior to the application being submitted to the DEA on 11 April 2019 (Appendix C6);
- Notification and distribution of notification letters (via email, fax, post and sms) of the EA amendment process and comment period distributed on the 3rd of June 2019 (Proof of notifications are included in **Appendix C1**.
- Availability of the Draft EA Amendment Motivation Report to the public for review and comment on SiVEST's website for a period of 30 days from Monday 03 June 2019 to Friday 05 July 2019; and
- Email notification to all OoS / Authorities on the 3rd of July 2019 in order to inform them about the closure of the 30-day comment and review period for the Draft EA Amendment Motivation Report, as well as to remind them to submit comments in this regard (proof of the email notification is provided in Appendix C4).

6.6 Proof of Notification

All proofs of notification to I&APs are included in **Appendix C**. More specifically, the types of proofs will be as follows:

- Proof of notification to affected landowners and relevant provincial authority (namely NC DENC) about the EA Amendment Application (Appendix C6);
- Site notice text (Appendix C1);
- Photographs and GPS Coordinates of site notices (Appendix C1);
- Proof of advertisements (namely tear-sheets) in the "Gemsbok" local newspaper (Appendix C2);
 and
- Correspondence to and from registered I&APs and key stakeholders (Appendix C4).

6.7 Comments and Response Report (C&RR)

Issues, comments and concerns raised throughout the EA amendment process (including comments received during the Draft EA Amendment Motivation Report's commenting period) were captured in the Comments and Response Report (CRR) (**Appendix C5**), as and when they were received. The C&RR provides a summary of the issues raised, as well as responses which were provided to I&APs, key stakeholders and OoS / Authorities. This information was also taken into consideration when compiling this report. All comments received to date have been included in the C&RR.

6.8 Distribution to Organs of State (OoS) / Authorities

Table 7 below includes all the key stakeholders / OoS / authorities who were sent electronic copies (on CD) of the Draft EA Amendment Motivation Report (including all appendices) during the 30-day comment and review period. A copy of the letter which accompanied the electronic copy (on CD) of the Draft EA Amendment Motivation Report which was sent to all the key stakeholders / OoS / authorities is included in **Appendix C7**. The remaining proofs of distribution (i.e. email notification) are included in **Appendix C7** of this Final EA Amendment Motivation Report.

All key stakeholders / OoS / authorities were given 30 days to comment on the Draft EA Amendment Motivation Report. It should be noted that all key stakeholders / organs of state / authorities were contacted near the end of the 30-day comment and review period and were reminded to submit comments before this period closed. Comments received from key stakeholders / OoS / authorities during the 30-day comment and review period were incorporated into the Final EA Amendment Motivation Report, which was submitted to the competent authority (namely the DEA) for decision-making on 15 July 2019. All key stakeholders / OoS / authorities were subsequently notified about the submission of the Final EA Amendment Motivation Report.

As such, all key stakeholders / OoS / authorities which have jurisdiction in respect of any aspect of the relevant activity have been informed of the proposed amendments accordingly and were given 30 days to comment on the Draft EA Amendment Motivation Report.

Table 7: Distribution of Draft EA Amendment Motivation Report to OoS and follow-up consultation

PROPOSED DEVELOPMENT OF THE ALETTA 140MW WIND ENERGY FACILITY (WEF), NEAR COPPERTON NORTHERN CAPE PROVINCE

DISTRIBUTION OF THE DRAFT EA AMENDMENT MOTIVATION REPORT TO ORGANS OF STATE FOR COMMENT POSTAL REPORT **RESPONSE / RECEIPT** TITLE **SURNAME** NAME **POSITION EMAIL ADDRESS ADDRESS** DISTRIBUTION **OF COMMENTS** SIYATHEMBA LOCAL MUNICIPALITY Mr Basson Jakob LED Manager PO Box 16 jakob@siyathemba.gov.za Electronic copy Access to an electronic PRIESKA on CD emailed copy of the report was 8940 and posted - 03 emailed and posted on 03 June 2019 June 2019. An email reminder was sent on 03 Electronic copy 2019. **SIVEST** Ms Louw Ernstine Environmental PO Box 16 ernstinelouw@gmail.com July contacted the municipality Health **PRIESKA** on CD emailed and Ms Louw confirmed Practitioner 8940 and posted - 03 that there are June 2019 comments from the Local Municipality. PIXLEY KA SEME DISTRICT MUNICIPALITY Private Bag Mr Nkondeshe Sonwabile Senior snkondeshe@environment.gov.za Electronic copy Access to an electronic Environmental X1012 on CD emailed copy of the report was emailed and posted on 03 Officer DE AAR and posted - 03 7000 June 2019 June 2019. An email reminder was sent on 03 LED Manager excellentsolutions@live.co.za 2019. **SIVEST** July Mr Madyo Sindisile Private Bag Electronic copy contacted the municipality X1012 on CD emailed Mr Nkondeshe DE AAR and posted - 03 and 7000 June 2019 confirmed that there are no comments from the District Municipality. DEPARTMENT OF ENVIRONMENTAL AFFAIRS BIODIVERSITY

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SiVEST Environmental Division

Proposed Development of the Aletta 140MW Wind Energy Facility (WEF) - Final EA Amendment Report

Version No: 1

Lekota	Seoka		Private Bag X447 Pretoria 0001	slekota@environment.gov.za	Electronic copy on CD emailed and posted - 03 June 2019	Access to an electronic copy of the report was emailed and posted on 03 June 2019. An email reminder was sent on 03
Rabothata	Mmatlala		Private Bag X447 Pretoria 0001	slekotamrabothata@environment. gov.za	Electronic copy on CD emailed and posted - 03 June 2019	July 2019. SiVEST contacted the department and Mr Tshitwamulomoni requested that we email the electronic copy again and he will revert back.
SA-NORTHERN	CAPE					
Myburg	Henning	General Manager	PO Box 1094 KIMBERLEY 8300	henning@agrink.co.za	Electronic copy on CD emailed and posted - 03 June 2019	Access to an electronic copy of the report was emailed and posted on 03 June 2019. An email reminder was sent on 03 July 2019. SiVEST contacted the municipality and Mr Myburg confirmed that there are no comments from the department.
RTMENT OF W	ATER AND S	SANITATION				
Mokhoantle	Lerato	Environmental Officer	28 Central road Beaconsfield Kimberley 8300	Mokhoantlel@dws.gov.za	Electronic copy on CD emailed and posted - 03 June 2019	Access to an electronic copy of the report was emailed and posted on 03 June 2019. An email reminder was sent on 03
Mahunonya ne	Moses	Director: Institutional Establishment	Private Bag X6101 KIMBERLEY 8300	MahunonyaneM@dws.gov.za	Electronic copy on CD emailed and posted - 03 June 2019	July 2019. Attempts were made to contact Ms Mokhoantle telephonically to no avail. Any comments received from the DWS after submission of the EA Amendment Report will be forwarded to the DEA.
	Rabothata SA-NORTHERN Myburg RTMENT OF W Mokhoantle Mahunonya	Rabothata Mmatlala SA-NORTHERN CAPE Myburg Henning RTMENT OF WATER AND S Mokhoantle Lerato Mahunonya Moses	RANORTHERN CAPE Myburg Henning General Manager RTMENT OF WATER AND SANITATION Mokhoantle Lerato Environmental Officer Mahunonya ne Director: Institutional	Rabothata Mmatlala Private Bag X447 Pretoria 0001 SA-NORTHERN CAPE Myburg Henning General Manager PO Box 1094 KIMBERLEY 8300 RTMENT OF WATER AND SANITATION Mokhoantle Lerato Environmental Officer Coad Beaconsfield Kimberley 8300 Mahunonya ne Director: Institutional Establishment Private Bag X6101 KIMBERLEY	Rabothata Mmatlala Private Bag X447 Pretoria 0001 SA-NORTHERN CAPE Myburg Henning General Manager KIMBERLEY S300 Mahunonya ne Moses ne Director: Institutional Establishment KIMBERLEY Mabothata Mmatlala Private Bag X447 Pretoria 0001 PO Box 1094 Private Bag X647 Pretoria 0001 Mokhoantle Lerato Environmental Officer Bag 3300 Mahunonya ne Moses Director: Institutional Establishment KIMBERLEY Mahunonya Nose Director: Institutional Establishment KIMBERLEY Mahunonya Nose Nose Nose Nose Nose Nose Nose Nose	Rabothata Mmatlala Private Bag X447 Pretoria 0001 Silve 2019 SA-NORTHERN CAPE Myburg Henning General Manager Mokhoantle Lerato Officer Silve Bag Salve Companied and posted - 03 June 2019 Mokhoantle Lerato Service Private Bag Mokhoantlel@dws.gov.za Silve Copy on CD emailed and posted - 03 June 2019 Mokhoantle Lerato Service Private Bag Roman Mokhoantle Silve Sil

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Proposed Development of the Aletta 140MW Wind Energy Facility (WEF) – Final EA Amendment Report

Version No: 1

15 July 2019

Mr	Cloete	Alexander		P.O. Box 65 Calvinia 8190	acloete@ncpg.gov.za	Electronic copy on CD emailed and posted - 03 June 2019	Access to an electronic copy of the report was emailed and posted on 03 June 2019. An email reminder was sent on 03 July 2019. Attempts were made to contact Mr Cloete telephonically to no avail. Any comments received from the NC Dept Agri, Land Reform & Rural Dev after submission of the EA Amendment Report will be forwarded to the DEA.
			, FORESTRY ANI	PISHERIES			
Northe	rn Cape Depa	rtment					
Ms	Mans	Jacoline	Chief Forester	Koelenhof 306 Schroder Street UPINGTON 8800	jacolinema@daff.gov.za	Electronic copy on CD emailed and posted - 03 June 2019	Access to an electronic copy of the report was emailed and posted on 03 June 2019. An email reminder was sent on 03 July 2019. Attempts were made to contact Ms Mann telephonically to no avail. Any comments received from the NC DAFF after submission of the EA Amendment Report will be forwarded to the DEA.
Provin	cial Departme	nt					
Ms	Marubini	Mashudu	Delegate of the Minister	Private Bag X120 PRETORIA 0001	MashuduM@daff.gov.co.za	Electronic copy on CD emailed and posted - 03 June 2019	Access to an electronic copy of the report was emailed and posted on 03 June 2019. An email reminder was sent on 03

Mrs	Buthelezi	Thoko	Directorate Land Use and Soil Management	Private Bag X120 PRETORIA 0001	ThokoB@daff.gov.za	Electronic copy on CD emailed and posted - 03 June 2019	July 2019. Attempts were made to contact Ms Buthelezi and Ms Mashudu telephonically to no avail. Any comments received from DAFF after submission of the EA Amendment Report will be forwarded to the DEA.
DEPAR	RTMENT OF MI	INERAL RESC	OURCES (DMR)				
Mr	Ravhogoni	Ntsundeni	Regional Manager	Private Bag x6093 KIMBERLEY 8300	Ntsundeni.Ravhogoni@dmr.gov.za	Electronic copy on CD emailed and posted - 03 June 2019	Access to an electronic copy of the report was emailed and posted on 03 June 2019. An email reminder was sent on 03 July 2019. Attempts were made to contact Mr Ravhogoni telephonically to no avail. Any comments received from DMR after submission of the EA Amendment Report will be forwarded to the DEA.
NORTI	HERN CAPE D	EPT OF ENVI	RONMENT AND I	NATURE CONSE	RVATION		
Mr	Fisher	Brian	Director Environmental Impact Management	Private Bag X86102 KIMBERLEY 8300	bfisher@ncpg.gov.za	Electronic copy on CD emailed and posted - 03 June 2019	Access to an electronic copy of the report was emailed and posted on 03 June 2019. An email reminder was sent on 03
Mr	Mthombeni	Thulani		Private Bag X86102 KIMBERLEY 8300	tmthombeni@ncpg.gov.za	Electronic copy on CD emailed and posted - 03 June 2019	July 2019. Attempts were made to contact Mr Fisher and Mr Mthombeni telephonically to no avail. Any comments received from DAFF after submission of the EA Amendment Report will be forwarded to the DEA.

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Proposed Development of the Aletta 140MW Wind Energy Facility (WEF) – Final EA Amendment Report

Version No: 1

15 July 2019

Mr	Lenyibi	Patrick	Manager:	Private Bag	plenyibi@ncpg.gov.za	Electronic copy	Access to an electronic
	Lorryion	1 dirior	Heritage	X5004	pionyibi enopg.gov.za	on CD emailed	copy of the report was
			Resources	KIMBERLEY		and posted - 03	emailed and posted on 03
			1100001000	8300		June 2019	June 2019. An emai
				0000		dane 2010	reminder was sent on 03
							July 2019. Attempts were
							made to contact Mr
							Lenyibi telephonically and
							he has promised to follow
							up and revert back. Any
							comments received from
							NC Dept Sport, Arts &
							Culture after submission
							of the EA Amendment
							Report will be forwarded to
							the DEA.
SANR	AL						
Ms	Abrahams	Nicole	Environmental	Private Bag	abrahamsn@nra.co.za	Electronic copy	Access to an electronic
			Coordinator	X19		on CD emailed	copy of the report was
				BELLVILLE		and posted - 03	emailed and posted on 03
				7535		June 2019	June 2019. An email
							reminder was sent on 03
							July 2019. Attempts were
							made to contact Ms
							Abrahams telephonically but she was in a meeting.
							Any comments received
							from NC Dept Sport, Arts
							& Culture after submission

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Mr	Roelofse	Jaco	Director: Planning & Design	PO Box 3132 Kimberley 8300	roelofse.j@vodamail.co.za	Electronic copy on CD emailed and posted - 03 June 2019	Access to an electronic copy of the report was emailed and posted on 03 June 2019. An email reminder was sent on 03 July 2019. Comments from the NC DR & PW received on 05 July 2019.
SAHRA	: HEAD OFFI	CE					
Ms	Higgitt	Natasha	Heritage Officer: Northern Cape	PO Box 4637CAPE TOWN8000	nhiggitt@sahra.org.za	Uploaded to the SAHRIS Website on 05 June 2019	Access to an electronic copy of the report was emailed and posted on 03 June 2019. An email reminder was sent on 03 July 2019. Comments from the SAHRA received on 28 June 2019.
ESKON	1						
Mr	Geeringh	John	Chief Planner	PO Box 1091 JOHANNESB URG 2000	GeerinJH@eskom.co.za	Electronic copy on CD emailed and posted - 03 June 2019	Access to an electronic copy of the report was emailed and posted on 03 June 2019. An email reminder was sent on 03 July 2019. Comments from ESKOM received on 10 June 2019.
SQUAF	E KILOMETR	E ARRAY (SK	(A)				
Dr	Tiplady	Adriaan	Manager: Site Categorisation	PO Box 522 SAXONWOLD 2132	atiplady@ska.ac.za	Electronic copy on CD emailed and posted - 03 June 2019	Comments with regards to the Square Kilometer Array (SKA) were sought from the South African Radio Astronomy Observatory (SARAO), as this organisation is responsible for managing all radio astronomy initiatives and facilities in

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Proposed Development of the Aletta 140MW Wind Energy Facility (WEF) – Final EA Amendment Report

Version No: 1

15 July 2019

							South Africa. They were contacted via telephone on 11 July 2019 in order to confirm this.
SA CI	VIL AVIATION	AUTHORITY ((SA CAA)				
Ms	Stroh	Lizell	Obstacle Specialist	Private Bag X73 HALFWAY HOUSE 1685	strohl@caa.co.za	Electronic copy on CD emailed and posted - 03 June 2019	Access to an electronic copy of the report was emailed and posted on 03 June 2019. An email reminder was sent on 03 July 2019. Attempts were made to contact Ms Stroh telephonically to no avail. Any comments received from NC Dept Sport, Arts & Culture after submission of the EA Amendment Report will be forwarded to the DEA.
AIR T	RAFFIC AND N	AVIGATION S	SERVICES (ATNS)			
Ms	Morobane	Johanna	Manager: Corporate Sustainability and Environment	Private Bag X15 KEMPTON PARK 1620	JohannaM@atns.co.za	on CD emailed and posted - 03 June 2019	Access to an electronic copy of the report was emailed and posted on 03 June 2019. An email reminder was sent on 03
Ms	Masilela	Simphiwe	Obstacle Evaluator	Private Bag X15 KEMPTON PARK 1620	obstacles@atns.co.za SimphiweM@atns.co.za	Electronic copy on CD emailed and posted - 03 June 2019	July 2019. Comments from ATNS received on 05 July 2019.
	SNET FREIGH	T RAIL					
TRAN	ONE I INCION				sam.fiff@transnet.net	Electronic copy	Access to an electronic

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SiVES

Proposed Development of the Aletta 140MW Wind Energy Facility (WEF) – Final EA Amendment Report

Version No: 1

							made to contact Mr Fiff telephonically to no avail. Any comments received from the DWS after submission of the EA Amendment Report will be forwarded to the DEA
SENTI	ЕСН						
Mr	Koegelenb erg	Johan	Renewable Projects	Private Bag X06 Honeydew 2040	koegelenbergj@sentech.co.za	Electronic copy on CD emailed and posted - 03 June 2019	Access to an electronic copy of the report was emailed and posted on 03 June 2019. An email reminder was sent on 03 July 2019. Comments from SENTECH received on 19 June 2019.
SARA	0		•				
Mr	Matlhane	Selaelo	Spectrum & Telecommunic ation Manager		smatlhane@ska.ac.za	Electronic copy on CD emailed and posted - 03 June 2019	Access to an electronic copy of the report was emailed and posted on 03 June 2019. An email reminder was sent on 03 July 2019. Comments from SARAO received on 05 July 2019.
TELK	OM						
Ms	Spammer	Candice		10 Jan Smuts Drive Pinelands CAPE TOWN 7404	SpammerC1@telkom.co.za	Electronic copy on CD emailed and posted - 03 June 2019	Access to an electronic copy of the report was emailed and posted on 03 June 2019. An email reminder was sent on 03
Ms	Peters	Ihlaam		10 Jan Smuts Drive Pinelands CAPE TOWN 7404	ihlaamp@telkom.co.za	Electronic copy on CD emailed and posted - 03 June 2019	July 2019. Attempts were made to contact Ms Spammer and Ms Peters telephonically to no avail. Any comments received from Telkom after

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Proposed Development of the Aletta 140MW Wind Energy Facility (WEF) – Final EA Amendment Report

Version No: 1

15 July 2019

							submission of the EA Amendment Report will be forwarded to the DEA.
ENDA	 NGERED WILD	 DLIFE TRUST	(EWT)				
Mr	Leeuwner	Lourens	Renewable Energy Project Manager	Private Bag X11, Modderfontein, 1609, Johannesburg	lourensl@ewt.org.za	Electronic copy on CD emailed and posted - 03 June 2019	Access to an electronic copy of the report was emailed and posted on 03 June 2019. An email reminder was sent on 03 July 2019. Attempts were made to contact Mr Leeuwner telephonically to no avail. Any comments received from the DWS after submission of the EA Amendment Report will be forwarded to the DEA
WESS	A						
Mr	Griffiths	Morgan	Environmental Governance Programme Manager	PO Box 12444, Centrahil, Port Elizabeth, 6006, South Africa	morgan.griffiths@wessa.co.za	Electronic copy on CD emailed and posted - 03 June 2019	Access to an electronic copy of the report was emailed and posted on 03 June 2019. An email reminder was sent on 03 July 2019. Attempts were made to contact Mr Griffiths telephonically to no avail. Any comments received from WESSA after submission of the EA Amendment Report will be forwarded to the DEA.

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Proposed Development of the Aletta 140MW Wind Energy Facility (WEF) – Final EA Amendment Report

Version No: 1

15 July 2019

Ms	Ralston	Samantha	Birds and Renewable Energy Manager	PO Box 515 RANDBURG 2125	energy@birdlife.org.za	Electronic copy on CD emailed and posted - 03 June 2019	Access to an electronic copy of the report was emailed and posted on 03 June 2019. An email
Ms	Stevens	Candice	Policy Manager	PO Box 515 RANDBURG 2125	advocacy@birdlife.org.za	Electronic copy on CD emailed and posted - 03 June 2019	reminder was sent on 03 July 2019. Attempts were made to contact Ms Ralston and Ms Stevens telephonically to no avail. Mr Booths has however promised to look into the report and revert back. He did mention that if we do not receive any response to assume that there are no comments from BirdLife. Any comments received from BirdLife after submission of the EA Amendment Report will be forwarded to the DEA.

7 CONCLUSION AND RECOMMENDATIONS

Although the new specifications are still in-line with the specialist assessments undertaken for the WEF and findings set out in the FEIAr dated 20 January 2017, the EA issued on 09 May 2017 will need to be amended to reflect the larger turbine specifications. It was however confirmed that the proposed amendments will not result in any additional negative environmental impacts, over-and-above those already assessed in the FEIAr and authorised in the EA issued on 09 May 2017, and will not change the nature or scope of the proposed development from what was assessed. As such, no additional impacts will be associated with the proposed amendments and the environmental impacts identified in the FEIAr dated 20 January 2017 would need to be considered and assessed. Additionally, there are no disadvantages associated with the proposed amendment, as all negative impact were already identified, considered and assessed in the EIA process which was undertaken for the Aletta WEF. As such, it is requested that the EA dated 09 May 2017 be amended to allow for increased turbine dimensions.

A Public Participation Process was conducted as outlined in Chapter 6 of the EIA Regulations 2014 (as amended), to obtain comments from I&APs, key stakeholder and OoS / Authorities on the proposed amendments to the turbine specifications. The public review and comment period for the Draft EA Amendment Motivation Report was undertaken from Monday 03 June 2019 to Friday 05 July 2019 over a 30-day period. All comments received throughout the EA amendment process (including comments received during the Draft EA Amendment Motivation Report's commenting period) were incorporated into the Final Amendment Motivation Report, which was submitted to the competent authority (namely the DEA) for decision-making on 15 July 2019.

7.1 Environmental Impact Statement

SiVEST Environmental Division, as the EAP, is therefore of the opinion that:

- The new specifications are still in-line with the specialist assessments undertaken for the WEF and findings set out in the FEIAr dated 20 January 2017.
- The proposed amendments will not result in any additional negative environmental impacts, overand-above those already assessed in the FEIAr and authorised in the EA issued on 09 May 2017.
- No additional and/or new mitigation measures need to be implemented as a result of the proposed amendments.
- The Draft EMPr which was submitted along with the FEIAr dated 20 January 2017 has been amended and/or updated to include the generic recommendations and/or conditions provided in the comments received from OoS / Authorities during the 30-day review and comment period for the Draft EA Amendment Motivation Report. The Draft EMPr submitted with this Final EA Amendment Motivation Report should <u>not be approved</u> as it will still need to be amended to include the measures dictated by the final site layout map and micro-siting as indicated in Condition 17 of the EA.
- The EA issued 09 May 2017 should be amended to allow for increased turbine dimensions.

It is trusted that this Final EA Amendment Motivation Report provides the reviewing authority with adequate information to make an informed decision regarding the requested amendments.

Version No: 1 15 July 2019

8 REFERENCES

- Angel, J. 2016: Aletta Wind Energy Facility: Heritage Impact Report, PGS Heritage.
- Broughton, E., 2016: Environmental Impact Assessment for the Aletta 140MW Wind Farm: Socioeconomic Impact Study, Urban Econ Development Economists.
- Fouché, C., 2016: Path Loss and Risk Assessment Report for the New Aletta Wind Farm Layout including Emission Control Plan for the AW125 TH100A WTG. Interference Testing and Consulting Services (Pty) Ltd. Pretoria.
- Fouché, C., 2019: Path loss and electrical design change evaluation of the Acciona AW125 TH100A wind turbine for Aletta Windfarm. Interference Testing and Consulting (ITC) Services (Pty) Ltd. Pretoria.
- Gibb, A., 2016: Proposed Construction of the Aletta 140MW Wind Energy Facility near Copperton, Northern Cape Province: Visual Impact Assessment Report Impact Phase, SiVEST. Rivonia.
- Hoare, D., 2016: Ecological study on the potential impacts of the proposed BioTherm Aletta Wind Energy Facility near Copperton Northern Cape Province, David Hoare Consulting. Pretoria.
- Jacobs, S., 2017: Proposed Construction of the Aletta 140MW Wind Energy Facility near Copperton, Northern Cape Province: Final Environmental Impact Assessment Report. SiVEST. Rivonia.
- Jongens, A.W.D., 2016: Environmental Noise Impact Study: Proposed Establishment of a Wind Energy Facility, Aletta. near Copperton in the Northern Cape Province. Jongens Keet Associates.
- Marais, W. and Moir, M. 2016: Final Progress Report of a 12-month Preconstruction Bat Monitoring Study for the proposed Aletta 1 Wind Energy Facility Northern Cape Province. Cape Town.
- Paterson, D.G., 2016: Soil Information for the Proposed Aletta Wind Energy Facility, ARC-Institute for Soil, Climate and Water. Pretoria.
- Taylor, S., 2016: Proposed Construction of the Aletta 140MW Wind Farm Facility near Copperton Northern Cape Province Surface Water Impact Assessment Report. SiVEST. Rivonia.
- Van der Merwe, D., 2016: Proposed Construction of Aletta Wind 140MW Wind Energy Facility: Traffic Impact Study for the Transport of Wind Energy Equipment to a Facility in the Northern Cape Province. BVi Consulting Engineer. Sentury City.
- Van Rooyen, C., 2016: Bird Impact Assessment Study: Proposed BioTherm Aletta Wind Energy Facility near Copperton in the Northern Cape Province, Chris van Rooyen Consulting.



Appendix A **ENVIRONMENTAL AUTHORISATION (EA)**



Private Bag X 447· PRETORIA · 0001· Environment House · 473 Steve Biko Road, Arcadia, · PRETORIA Tel (+ 27 12) 399 9372

DEA Reference: 14/12/16/3/3/2/945 Enquiries: Ms Thabile Sangweni

Telephone: (012) 399 9409 E-mail: TSangweni@environment.gov.za

Ms Jasandra Nyker Biotherm Energy (Pty) Ltd PO Box 69408 BRYANSTON 2021

1 2 MAR 2019

Telephone Number:

(011) 367 4600

Email Address:

eiaadmin@biothermenergy.com

PER E-MAIL / MAIL

Dear Ms Nyker

APPLICATION FOR ENVIRONMENTAL AUTHORISATION IN TERMS OF THE NATIONAL ENVIRONMENTAL MANAGEMENT ACT, 1998: GN R. 983/984/985 FOR THE 140MW ALETTA WIND ENERGY FACILITY AND ITS ASSOCIATED INFRASTRUCTURE NEAR COPPERTON WITHIN THE SIYATHEMBA LOCAL MUNICIPALITY IN THE NORTHERN CAPE PROVINCE

With reference to the above application, please be advised that the Department has decided to grant authorisation. The environmental authorisation (EA) and reasons for the decision are attached herewith.

In terms of Regulation 4(2) of the Environmental Impact Assessment Regulations, 2014 (the Regulations), you are instructed to notify all registered interested and affected parties, in writing and within 14 (fourteen) days of the date of the Department's decision as well as the provisions regarding the submission of appeals that are contained in the Regulations.

Your attention is drawn to Chapter 2 of Government Notice No. R.993, which prescribes the appeal procedure to be followed. Kindly include a copy of this document with the letter of notification to interested and affected parties.

Should any person wish to lodge an appeal against this decision, he/she must submit the appeal to the appeal administrator, and a copy of the appeal to the applicant, any registered interested and affected party, and any organ of state with interest in the matter within 20 days from the date that the notification of the decision was sent to the registered interested and affected parties by the applicant; or the date that the notification of the decision was sent to the applicant by the Department, whichever is applicable.

Appeals must be submitted in writing in the prescribed form to:

Mr Z Hassam, Director: Appeals and Legal Review of this Department at the below mentioned addresses.

By email: appealsdirectorate@environment.gov.za;

By hand: Environment House

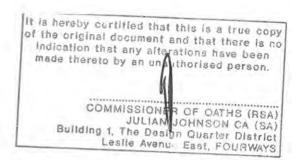
473 Steve Biko,

Arcadia, Pretoria, 0083; or

1 2 MAR 2019

By post: Private Bag X447,

Pretoria, 0001;



Please note that in terms of section 43(7) of the National Environmental Management Act, 1998, the lodging of an appeal 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 until such time that the appeal is finalised.

To obtain the prescribed appeal form and for guidance on the submission of appeals, please visit the Department's website at https://www.environment.gov.za/documents/forms#legal_authorisations or request a copy of the documents at appealsdirectorate@environment.gov.za.

Yours faithfully

Mr Sabelo Malaza

Chief Director: Integrated Environmental Authorisations

Department of Environmental Affairs

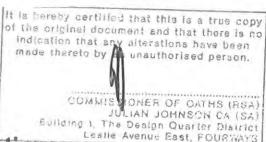
Date: 09/05/2017

cc: A Gibb Sivest SA (Pty) Ltd

Email: andreag@sivest.co.za

1 2 MAR 2019





Environmental Authorisation

In terms of Regulation 25 of the Environmental Impact Assessment Regulations, 2014

The 140MW Aletta Wind Energy Facility (WEF) and its associated infrastructure near Copperton within the Siyathemba Local Municipality in the Northern Cape Province

Pixley ka Seme District Municipality

Authorisation register number:	14/12/16/3/3/2/945
Last amended:	First issue
Holder of authorisation:	Biotherm Energy (Pty) Ltd
Location of activity:	Portion 1 of Drielings Pan No. 101; Portion 2 of Drielings Pan No. 101; Portion 3 of Drielings Pan No. 101; Remainder of Drielings Pan No. 101; Siyathemba Local Municipality; Pixley ka Seme District Municipality; Northern Cape Province

This authorisation does not negate the holder of the authorisation's responsibility to comply with any other statutory requirements that may be applicable to the undertaking of the activity.

Decision

The Department is satisfied, on the basis of information available to it and subject to compliance with the conditions of this environmental authorisation, that the applicant should be authorised to undertake the activities specified below.

Non-compliance with a condition of this environmental authorisation may result in criminal prosecution or other actions provided for in the National Environmental Management Act, 1998 and the EIA regulations.

Details regarding the basis on which the Department reached this decision are set out in Annexure 1.

Activities authorised

By virtue of the powers conferred on it by the National Environmental Management Act, 1998 (Act No. 107 of 1998) and the Environmental Impact Assessment Regulations, 2014 the Department hereby authorises –

BIOTHERM ENERGY (PTY) LTD

1 2 MAR 2019

(hereafter referred to as the holder of the authorisation)

with the following contact details -

Ms Jasandra Nyker Biotherm Energy (Pty) Ltd

PO Box 69408

BRYANSTON

2021

Telephone Number: (011) 367 4600

Cell phone Number: (082) 467 6555

Fax Number: (011) 367 4601

Email Address: eiaadmin@biothermenergy.com

to undertake the following activities (hereafter referred to as "the activity") indicated in Listing Notice 1, Listing Notice 2 and Listing Notice 3 as amended (GN R. 983, 984 and 985 as amended):

Activity number

GN R. 983 Item 11.

"Item 11: The development of facilities or infrastructure for the transmission and distribution of electricity-

(i) outside urban areas or industrial complexes with a capacity of more than 33 but less than 275 kilovolts."

Activity description

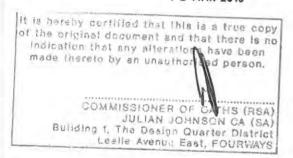
An onsite IPP substation will be constructed as part of the wind energy facility. The proposed IPP onsite substation will be located outside an urban area and will have a capacity of 132 kV

GN R. 983 Item 12:

"The development of -

- (ii) infrastructure or structures with a physical footprint of 100 square metres or more;
- where such development occurs-
- (a) within a watercourse;
- (c) if no development setback exists, within 32 metres of a watercourse, measured from the edge of a watercourse."

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The proposed project will entail the development of buildings and other infrastructure exceeding 100 square metres in size. This activity will not be triggered by the wind turbines, substation and O&M building since none of these structures are planned to be directly within or within close proximity (within 32m) to the identified surface water resources. However, internal access roads will be required which will need to route to the respective wind turbine locations and to the O&M building and infrastructure. Since the drainage lines can extend for some kilometres and the distribution of the wetlands are amongst the wind turbine locations, the internal access roads and other associated infrastructure will need to cross or be within close proximity to the delineated surface water resources.

GN R. 983 Item 19:

"The infilling or depositing of any material of more than 10 cubic metres into, or the dredging, excavation, removal or moving of soil, sand, shells, shell grit, pebbles or rock of more than 10 cubic metres from a watercourse..."

The impact phase surface water assessment revealed that there are surface water features located on the proposed development area. This listed activity will not be triggered by wind turbines, substation and O&M building since none of these

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GN R. 983 Item 24:

"The development of a road

(ii) with a reserve wider than 13,5 meters, or where no reserve exists where the road is wider than 8 metres."

GN R. 983 Item 28:

"Residential, mixed, retail, commercial, industrial or institutional developments where such land was used for agriculture, game farming, equestrian purposes or afforestation on or after 01 April 1998 and where such development:

(ii) will occur outside an urban area, where the total land to be developed is bigger than 1 hectare;

excluding where such land has already been developed for residential, mixed, retail, commercial, industrial or institutional purposes."

GN R. 983 Item 56:

"The widening of a road by more than 6 metres, or the lengthening of a road by more than 1 kilometre—

(ii) where no reserve exists, where the existing road is wider than 8 metres:

structures are planned to be within the identified surface water resources. However, internal access roads will be required which will need to route to the respective wind turbine locations, O&M building and infrastructure. Since the drainage lines can extend for some kilometres and the distribution of the wetlands are amongst the wind turbine locations, the internal access roads and other associated infrastructure may need to cross the delineated surface water resources. Should construction activities take place within a watercourse, soil will need to be removed.

Onsite roads will be required for the proposed development. The width of these roads will be 4m to 6m, however road widths greater than 8 metres will be required for turning circles.

The proposed project site is currently used for sheep farming, and the proposed project will result in an area greater than 1 hectare being transformed into an industrial land use.

It is likely that existing access roads will need to be upgraded in order to access the site. The required width and length of the expansion will be determined during the design phase.

excluding where widening or lengthening occur inside urban areas."

GN R 984 Item 1:

"The development of facilities or infrastructure for the generation of electricity from a renewable resource where the electricity output is 20 megawatts or more, excluding where such development of facilities or infrastructure is for photovoltaic installations and occurs—

- (a) within an urban area; or
- (b) on existing infrastructure."

GN R. 984 Item 15:

"The clearance of an area of 20 hectares or more of indigenous vegetation, excluding where such clearance of indigenous vegetation is required for—

- (i) the undertaking of a linear activity; or
- (ii) maintenance purposes undertaken in accordance with a maintenance management plan."

It is proposed that a wind energy facility with a maximum export capacity of 140MW will be constructed.

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Leslie Avenu. East, FOURWAYS

The proposed development will transform more than 20 hectares of indigenous vegetation. The area occupied by each wind turbine will be up to 0.5 hectares and there are proposed to be up to 60 turbines as well as associated infrastructure. Clearance will also be required for the proposed IPP substation, O&M building, internal access roads and other associated infrastructure.

GN R. 985 Item 4:

"The development of a road wider than 4 metres with a reserve less than 13,5 metres.

- (g) Northern Cape
- (ii) Outside urban areas:
- (bb) National Protected Area Expansion Strategy Focus areas;
- (cc) Sensitive areas as identified in an environmental management framework as contemplated in chapter 5 of the Act and as adopted by the competent authority."

Internal roads will be constructed and these are planned to be more than 4m wide. According to the National Parks Area Expansion Strategy (NPAES), the central part of the proposed area has been identified as a priority area for inclusion in future protected areas. It should however, be noted that the area on site shown as being included in the NPAES includes a small portion of the hills as well as mostly plain areas.

Based on the field assessment of this site the specific areas selected for inclusion in the NPAES are not unique to that specific location and could be

accommodated in adjacent areas. The hills on site were considered to all have equivalent biodiversity patterns. Some of the plains in the selected area were also considered to be slightly compromised by existing activities on site (farmhouse, roads and livestock impacts).

GN R. 985 Item 14:

"The development of -

(ii) infrastructure or structures with a physical footprint of 10 square metres or more;

where such development occurs-

- (a) within a watercourse;
- (c) if no development setback has been adopted, within 32 metres of a watercourse, measured from the edge of a watercourse
- (g) Northern Cape
- ii Outside urban areas:
- (bb) National Protected Area Expansion Strategy Focus areas;
- (dd) Sensitive areas as identified in an environmental management framework as contemplated in chapter 5 of the Act and as adopted by the competent authority."

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Leslie Avenu- East, FOURWAYS

The proposed project will entail the development of buildings and other infrastructure exceeding 10 square metres in size. This activity will not be triggered by the wind turbines, substation and O&M building since none of these structures are planned to be within the identified surface water resources. However, internal access roads will be required which will need to route to the respective wind turbine locations and to the O&M building and infrastructure. Since the drainage lines can extend for some kilometres and the distribution of the wetlands are amongst the wind turbine locations, the internal access roads and other associated infrastructure will need to cross or be within close proximity to the delineated surface water resources.

According to the National Parks Area Expansion Strategy (NPAES), the central part of the proposed area has been identified as a priority area for inclusion in future protected areas. It should however, be noted that the area on site shown as being included in the NPAES includes a small portion of the hills as well as mostly plain areas.

Based on the field assessment of this site the specific areas selected for inclusion in the NPAES are not unique to that specific location and could be

accommodated in adjacent areas. The hills on site were considered to all have equivalent biodiversity patterns.

GN R. 985 Item 18:

"The widening of a road by more than 4 metres, or the lengthening of a road by more than 1 kilometre.

- (g) Northern Cape
- ii Outside urban areas:
- (bb) National Protected Area Expansion Strategy Focus areas;
- (cc) Sensitive areas as identified in an environmental management framework as contemplated in chapter 5 of the Act and as adopted by the competent authority;
- (ii) Areas within a watercourse or wetland; or within 100 metres from the edge of a watercourse or wetland."

Existing access roads will need to be upgraded in order to access the site. According to the National Parks Area Expansion Strategy (NPAES), the central part of the proposed application site has been identified as a priority area for inclusion in future protected areas. It should however be noted that the area on site shown as being included in the NPAES includes a small portion of the hills as well as mostly plain areas.

Based on the field assessment of this site, the site specific areas selected for inclusion in the NPAES are not unique to that specific location and could be accommodated in adjacent areas. The hills on site were considered to all have equivalent biodiversity patterns.

Internal access roads will be required which will need to route to the respective wind turbine locations and to the O&M building and infrastructure. Since the drainage lines can extend for some kilometres and the distribution of the wetlands are amongst the wind turbine locations, the internal access roads and other associated infrastructure will need to cross or be within close proximity to the delineated surface water resources.

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JULIAN JOHNSON CA (SA)
Building 1, The Design Cuarter District Lealle Avenue East, FOURWAYS

as described in the Environmental Impact Assessment Report (EIAr) dated January 2017 at:

21 SG Codes:

C	0	6	0	0	0	0	0	0	0	0	0	0	11	0	1	0	0	0	0	1
С	0	6	0	0	0	0	0	0	0	0	0	0	1	0	11	0	0	0	0	2
Ç	0	6	3	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	3
С	0	6	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0

WEF (preferred site)	Latitude	Longitude			
North-West	29° 55′ 57.522″S	22° 28' 39.802"E			
North-East	29° 52' 51.794"S	22° 32' 27.848"E			
South-East	29° 59' 52.858"S	22° 35′ 30.970″E 22° 34′ 49.743″E 22° 32′ 27.034″E			
South-West	30° 00' 36.296"S				
Centre	29° 56' 31.212"S				
Substation	29° 57' 17.823"S	22° 32' 50.861"E			
O&M Sites	29° 57′ 20.921″S	22° 32' 54.174"E			

- for the 140MW Aletta Wind Energy Facility and its associated infrastructure near Copperton within the Siyathemba Local Municipality, which falls under the jurisdiction of the Pixley ka Seme District Municipality in the Northern Cape Province, hereafter referred to as "the property".

The 140MW Aletta WEF will comprise the following:

- 60 wind turbines with a total output of 140MW. Turbines will have a hub height of 100m, a rotor diameter of 125m and a generation output of 3MW each;
- A 132kV onsite Aletta IPP substation;
- The turbines will be connected via medium voltage cables to the proposed 132kV onsite Aletta IPP substation;
- Internal access roads will be 4m to 6m wide;
- A temporary construction lay down area;

1 2 MAR 2019

A hard standing area/platform per turbine;

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- The operations and maintenance buildings, including on site spares storage building, a workshop and an operations building;
- Fencing (if required) will be up to 5m where required and will be either mesh or palisade; and,
- A permanent wind measurement mast.

Technical details of the proposed facility:

Component	Description / Dimensions ~ 20km east of the town of Copperton					
Location of the site						
Farm names 1 2 MAR 2019 It is hereby certified that this is a true copy of the original document and that there is no indication that any alterations have been made thereto by an unauthorised person. COMMISSIONER AT OATHS (RSA) JULIAN JOANSON CA (SA) Building 1, The Design Quarter District Leslie Avenus East, FOURWAYS	 Portion 1 of Drielings Pan No.101: C06000000000010100001 Portion 2 of Drielings Pan No.101: C06000000000010100002 Portion 3 of Drielings Pan No.101: C06000000000010100003 Remainder of Drielings Pan No.101 					
Site access	C0600000000010100000 Site access will be via an existing gravel track off the R357 approximately 34km from the N10 intersection					
Export capacity	Up to 140 MW Wind turbines Up to 60 wind turbines 100m					
Proposed technology						
Number of turbines						
Hub height from ground level						
Rotor diameter	125m Internal roads width: Between 4m to 6m					
Width of internal roads						

Conditions of this Environmental Authorisation

Scope of authorisation

- The construction of the Aletta Wind Energy Facility and its associated infrastructure with a maximum output capacity of 140 MW as described above is hereby approved.
- Only a wind turbine generator with the following specifications are authorised: An Acciona AW 125 TH 100A with a 100m hub height, 125m rotor diameter and a 3MW output.

- 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.
- 4. 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.
- 5. The activities authorised may only be carried out at the property as described above.
- 6. 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.
- 7. 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.
- 8. 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.
- 9. Construction must be completed within five (05) years of the commencement of the activity on site.
- Commencement with one activity listed in terms of this environmental authorisation constitutes commencement of all authorised activities.

Notification of authorisation and right to appeal

- 11. 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.
- 12. The notification referred to must -
 - 12.1. specify the date on which the authorisation was issued;
 - 12.2. inform the interested and affected party of the appeal procedure provided for in the National Appeal Regulations, 2014;

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of the original document and that there is no indication that any alterations have been made thereto by on upar thorised person.

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12.3. advise the interested and affected party that a copy of the authorisation will be request: and

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12.4. give the reasons of the competent authority for the decision.

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- 13. The holder of the authorisation must publish a notice -
 - 13.1. informing interested and affected parties of the decision;
 - 1 2 MAR 2019 13.2. informing interested and affected parties where the decision can be accessed; and
 - 13.3. 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.

Commencement of the activity

The authorised activity shall not commence until the period for the submission of appeals has lapsed as 14. per the National Appeal Regulations, 2014. 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 until such time that the appeal has been finalised.

Management of the activity

- 15. A copy of the final development layout map must be made available for comments by registered Interested and Affected Parties and the holder of this environmental authorisation must consider such comments. Once amended, the final development layout map must be submitted to the Department for written approval prior to commencement of the activity. All available biodiversity information must be used in the finalisation of the layout map. Existing infrastructure must be used as far as possible e.g. roads. The layout map must indicate the following:
 - 15.1. Cable routes (where they are not along internal roads);
 - 15.2. Position of wind turbines and associated infrastructure:
 - 15.3. Internal roads indicating width;
 - 15.4. Wetlands, drainage lines, rivers, stream and water crossing of roads and cables;
 - 15.5. All sensitive features e.g. Critical Biodiversity Areas, Ecological Support Areas, heritage sites, wetlands, pans and drainage channels that will be affected by the facility and associated infrastructure;
 - 15.6. Substation(s) inverters and/or transformer(s) sites including their entire footprint;
 - 15.7. Connection routes (including pylon positions) to the distribution/transmission network;

- 15.8. All existing infrastructure on the site, such as roads;
- 15.9. Soil heaps (temporary for topsoil and subsoil and permanently for excess material);
- 15.10. Buildings, including accommodation; and,
- 15.11. All "no-go" and buffer areas.
- 16. Furthermore, a shapefile of the approved development layout/footprint must be submitted to this Department within two months from the date of this decision. The shapefile must be created using the Hartebeesthoek 94 Datum and the data should be in Decimal Degree Format using the WGS 84 Spheroid. The shapefile must include at a minimum the following extensions i.e. .shp; .shx; .dbf; .prj; and, .xml (Metadata file). If specific symbology was assigned to the file, then the .avl and/or the .lyr file must also be included. Data must be mapped at a scale of 1:10 000 (please specify if an alternative scale was used). The metadata must include a description of the base data used for digitizing. The shapefile must be submitted in a zip file using the EIA application reference number as the title. The shape file must be submitted to:

Postal Address:

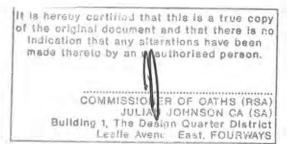
Department of Environmental Affairs

Private Bag X447

Pretoria

0001

1 2 MAR 2019



Physical address:

Department of Environmental Affairs

Environment House

473 Steve Biko

Arcadia

Pretoria

For Attention: Mr Muhammad Essop

Integrated Environmental Authorisations

Strategic infrastructure Developments

Telephone Number:

(012) 399 9406

Email Address:

MEssop@environment.gov.za

- 17. The Environmental Management Programme (EMPr) submitted as part of the ElAr is not approved and must be amended to include measures as dictated by the final site lay-out map and micro-siting, and the provisions of this environmental authorisation. The EMPr must be made available for comments by registered interested and Affected Parties and the holder of this environmental authorisation must consider such comments. Once amended, the final EMPr must be submitted to the Department for written approval prior to commencement of the activity. Once approved the EMPr must be implemented and adhered to.
- 18. The EMPr amendment must include the following:
 - 18.1. The requirements and conditions of this authorisation.
 - 18.2. All recommendations and mitigation measures recorded in the EIAr.
 - 18.3. All mitigation measures as listed in the specialist reports must be included in the EMPr and implemented.
 - 18.4. The final site layout map.
 - 18.5. An alien invasive management plan to be implemented during construction and operation of the facility. The plan must include mitigation measures to reduce the invasion of alien species and ensure that the continuous monitoring and removal of alien species is undertaken.
 - 18.6. A plant rescue and protection plan which allows for the maximum transplant of conservation important species from areas to be transformed. This plan must be compiled by a vegetation specialist familiar with the site in consultation with the ECO and be implemented prior to commencement of the construction phase.
 - 18.7 A re-vegetation and habitat rehabilitation plan to be implemented during the construction and operation of the facility. Restoration must be undertaken as soon as possible after completion of construction activities to reduce the amount of habitat converted at any one time and to speed up the recovery to natural habitats.
 - 18.8. A traffic management plan for the site access roads to ensure that no hazards would results from the increased truck traffic and that traffic flow would not be adversely impacted. This plan must include measures to minimize impacts on local commuters e.g. limiting construction vehicles travelling on public roadways during the morning and late afternoon commute time and avoid using roads through densely populated built-up areas so as not to disturb existing retail and commercial operations.
 - 18.9. A construction and operational avifauna and bat monitoring plan.
 - 18.10.A conservation management plan must be drafted and submitted to SAHRA for review and comment. The management plan, as recommended by SAHRA must be included in the final EMPr.

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- 18.11.A storm water management plan to be implemented during the construction and operation of the facility. The plan must ensure compliance with applicable regulations and prevent off-site migration of contaminated storm water or increased soil erosion. The plan must include the construction of appropriate design measures that allow surface and subsurface movement of water along drainage lines so as not to impede natural surface and subsurface flows. Drainage measures must promote the dissipation of storm water run-off.
- 18.12.An erosion management plan for monitoring and rehabilitating erosion events associated with the facility. Appropriate erosion mitigation must form part of this plan to prevent and reduce the risk of any potential erosion.
- 18.13.An effective monitoring system to detect any leakage or spillage of all hazardous substances during their transportation, handling, use and storage. This must include precautionary measures to limit the possibility of oil and other toxic liquids from entering the soil or storm water systems.
- 18.14.A fire management plan to be implemented during the construction and operational phases.
- 18.15.Measures to protect hydrological features such as streams, rivers, pans, wetlands, dams and their catchments, and other environmental sensitive areas from construction impacts including the direct or indirect spillage of pollutants.
- 18.16.An environmental sensitivity map indicating environmental sensitive areas and features identified during the EIA process.
- 18.17.A map combining the final layout map superimposed (overlain) on the environmental sensitivity map. This map must reflect the proposed location of the turbine as stated in the EIAr and this authorisation.
- 19. The final amended EMPr (once approved) must be implemented and strictly enforced during all phases of the project. It shall be seen as a dynamic document and shall be included in all contract documentation for all phases of the development when approved.
- Changes to the EMPr must be submitted to this Department for approval before such changes could be effected.
- The Department reserves the right to amend the approved EMPr should any impacts that were not anticipated or covered in the EIAr be discovered.

Frequency and process of updating the EMPr

22. The EMPr must be updated where the findings of the environmental audit reports, contemplated in Condition 29 below, indicate insufficient mitigation of environmental impacts associated with the

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- undertaking of the activity, or insufficient levels of compliance with the environmental authorisation or EMPr.
- The updated EMPr must contain recommendations to rectify the shortcomings identified in the environmental audit report.
- 24. 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 have been 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.
- 25. 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.
- 26. 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.

Monitoring

- 27. 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.
 - 27.1. The ECO must be appointed before commencement of any authorised activities.
 - 27.2. Once appointed, the name and contact details of the ECO must be submitted to the Director: Compliance Monitoring of the Department.
 - 27.3. The ECO must keep record of all activities on site, problems identified, transgressions noted and a task schedule of tasks undertaken by the ECO.
 - 27.4. The ECO must remain employed until all rehabilitation measures, as required for implementation due to construction damage, are completed and the site is ready for operation.

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Recording and reporting to the Department

- 28. 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.
- 29. 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.
- 30. 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.
- 31. The holder of the authorisation must, in addition, submit 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.
- 32. 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.
- 33. 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.

Notification to authorities

34. 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.

Operation of the activity

35. 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.

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Site closure and decommissioning

36. 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.

Specific conditions

Turbines position

- 37. Only a wind turbine generator with the following specifications are authorised: An Acciona AW 125 TH 100A with a 100m hub height, 125m rotor diameter and a 3MW output.
- 38. Should a different turbine generator be selected, the applicant is advised to apply for an amendment to the EA in terms of the EIA Regulations, relevant at the time, as well as undertake a new path loss and risk assessment (including a revised EMC control plan) to the satisfaction of SKA-SA.
- 39. All wind turbines must avoid all areas designated as "no-go" areas as well as their buffers.
- 40. The final placement of turbines must follow a micro siting procedure involving a walk-through and identification of any sensitive areas by botanical, avifaunal, bats and heritage specialists.
- 41. Exclusion of sensitive ecological, heritage and paleontological areas from construction activities must inform micro siting of all development activities.
- 42. Should any occupied farm buildings be affected by shadow flicker, the holder of this Environmental Authorisation must provide mitigation measures to reduce the impact to an acceptable level as advised by a suitably qualified specialist.

Avifauna and bats

- 43. A 3km buffer must be applied to the Verreaux's Eagle nest.
- 44. A 300m buffer must be applied to the Southern Pale Chanting Goshawk nest.
- 45. A 200m buffer must be applied to all identified water points.
- 46. A 250m buffer must be applied to high bat sensitivity areas.
- 47. If elevated bat mortalities are found during the operational monitoring, mitigation measures as outlined in Table 144 on page 428 of the EIAr dated January 2017 for turbines 18, 28, 33, 34, 38, 41, 48 and 49 must be applied.

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- 48. All turbines must be feathered below manufactures cut in speed so as to not allow for free-wheeling from 01 November to 31 March.
- 49. A construction and operational avifauna and bat monitoring plan must be developed and implemented according to the latest BirdLife South Africa/Endangered Wildlife Trust: Best practice guidelines for avian monitoring and impact mitigation at proposed wind energy development sites in Southern Africa and the latest South African Bat Assessment Advisory Panel's (SABAAP) guidelines.
- 50. As an absolute minimum, bird and bat monitoring, must occur during the construction period and continue for at least three years during the operation of the facility. The results of this monitoring must be made available to the DEA, Birdlife South Africa (BLSA) and the South African Bat Assessment Advisory Panel (SABAAP) and must further advise the EMPr where necessary.
- 51. The results of the pre-construction bird monitoring assessment including all recommendations proposed by the report dated January 2017, must inform the final layout and the construction schedule of the facility.
- 52. The holder must ensure the implementation of an operational monitoring plan to survey impacts resulting from the infrastructure on the bird communities with focus on assessing the displacement and disturbance effects of the development on the bird communities, as well as bird collisions and continue to gather information on the bird communities present in the area and monitor the effectiveness of the mitigation measures for a minimum duration of at least three years.
- 53. The facility must be designed in a manner that prevents infrastructure components from being used as perching or roosting substrates by birds and bats, as such is prohibited.
- 54. The holder of this environmental authorisation must restrict the construction activities to the footprint area. No access to the remainder of the property is allowed.
- 55. Anti-collision devices such as bird flappers must be installed where powerlines cross avifaunal corridors (e.g. grasslands, rivers, wetlands, and dams). The input of an avifaunal specialist must be obtained for the fitting of the anti-collision devices onto specific sections of the line once the exact positions of the towers have been surveyed and pegged. Additional areas of high sensitivity along the preferred alignment must also be identified by the avifaunal specialist for the fitment of anti-collision devices. These devices must be according to Eskom's Transmission and EWT's Guidelines.
- 56. A pre-construction walk through of the approved powerline alignment and turbine positions by a bat specialist, avifaunal specialist and ecologist, must be conducted to ensure that the micro-siting of the turbines, pylons and powerline alignments have the least possible impact, there are no nest sites of priority species on or close to the construction corridor and all protected plant species impacted are identified.

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Vegetation, wetlands and water resources

- 57. Areas identified as having medium-high sensitivity in the final biodiversity layout must be regarded as 'no-go' areas and must be avoided.
- 58. The 'no-go' areas of the development property must be clearly demarcated and must be excluded from the final layout plan.
- All watercourses are regarded as sensitive. All developments within 500m of watercourses must comply with the National Water Act.
- Relevant permits must be obtained from relevant authorities for any removal or destruction of Threatened or Protected Species (TOPs).
- 61. Before the clearing of the site, the appropriate permits must be obtained from the Department of Agriculture, Forestry and Fisheries (DAFF) for the removal of plants listed in the National Forest Act and from the relevant provincial department for the destruction of species protected in terms of the specific provincial legislation. Copies of the permits must be kept by the ECO.
- 62. Construction activities must be restricted to demarcated areas to restrict the impact on sensitive environmental features.
- 63. All areas of disturbed soil must be reclaimed using only indigenous grass and shrubs. Reclamation activities shall be undertaken according to the rehabilitation plan to be included in the final EMPr.
- 64. Topsoil from all excavations and construction activities must be salvaged and reapplied during reclamation.
- No exotic plants must be used for rehabilitation purposes; only indigenous plants of the area must be utilised.
- 66. No activities will be allowed to encroach into a water resource without a Water Use License being in place from the Department of Water and Sanitation.
- 67. Cleared alien vegetation must not be dumped on adjacent intact vegetation during clearing but must be temporarily stored in a demarcated area.
- Removal of alien invasive species or other vegetation and follow-up procedures must be in accordance with the Conservation of Agricultural Resources Act, 1983 (Act 43 of 1983).
- 69. Contractors and construction workers must be clearly informed of the no-go areas.
- 70. Where roads pass right next to major water bodies, provisions must be made for fauna such as toads to pass under the roads by using culverts or similar structures.
- 71. Bridge design must be such that it minimises impact to riparian areas with minimal alterations to water flow and must allow the movement of fauna and flora.

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- 72. The final development area should be surveyed for species suitable for search and rescue, which should be trans-located prior to the commencement of construction.
- 73. The 'no-go' areas of the development property must be clearly demarcated and must be avoided.
- 74. Electric fencing should not have any strands within 30cm of the ground, which should be sufficient to allow smaller mammals, reptiles and tortoises to pass through, but still remain effective as a security barrier.
- 75. Disturbed areas must be rehabilitated as soon as possible after construction with locally indigenous plants to enhance the conservation of existing natural vegetation on site.
- 76. Wetlands, rivers and river riparian areas must be treated as "no-go" areas and demarcated as such. No vehicles, machinery, personnel, construction material, fuel, oil, bitumen or waste must be allowed into these areas without the express permission of and supervision of the ECO, except for rehabilitation work in these areas.
- 77. Workers must be made aware of the importance of not destroying or damaging the vegetation along rivers and wetland areas and this awareness must be promoted throughout the construction phase.
- 78. Freshwater ecosystems located in close proximity to the construction areas must be inspected on a regular basis by the ECO for signs of disturbance from construction activities. If signs of disturbance are noted, immediate action must be taken to remedy the situation and, if necessary, a freshwater ecologist must be consulted for advice on the most suitable remediation measures.
- 79. No discharge of effluents or polluted water must be allowed into any rivers or wetland areas.
- 80. If construction areas are to be pumped of water (e.g. after rains), this water must be pumped into an appropriate settlement area, and not allowed to flow into any rivers or wetland areas.
- 81. Workers must be made aware of the importance of not polluting rivers or wetlands and of not undertaking activities that could result in such pollution, and this awareness must be promoted throughout the construction phase.
- 82. Freshwater ecosystems located in close proximity to the site must be inspected on a regular basis (but especially after rainfall) by the ECO for signs of sedimentation and pollution. If signs of sedimentation or pollution are noted, immediate action must be taken to remedy the situation and, if necessary, a freshwater ecologist must be consulted for advice on the most suitable remediation measures.

Roads and transportation

83. Existing road infrastructure must be used as far as possible for providing access to the proposed turbine positions. Where no road infrastructure exists, new roads must be placed within existing disturbed areas

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- or environmental conditions must be taken into account to ensure that minimum amount of damage is caused to natural habitats.
- 84. Signs must be placed along construction roads to identify speed limits, travel restrictions, and other standard traffic control information. To minimize impacts on local commuters, consideration must be given to limiting construction vehicles travelling on public roadways during the morning and late afternoon commute time.
- 85. Internal access roads must be located to minimize stream crossings. All structures crossing streams must be located and constructed such that they do not decrease channel stability or increase water velocity.
- 86. A designated access to the site must be created and clearly marked to ensure safe entry and exit.
- 87. Signage must be erected at appropriate points warning of turning traffic and the construction site.
- 88. Necessary permits must be obtained for the oversized construction vehicles to transport turbine components.
- 89. Construction vehicles carrying materials to the site must avoid using roads through densely populated built-up areas so as not to disturb existing retail and commercial operations.
- 90. Signs must be placed along construction roads to identify speed limits, travel restrictions, and other standard traffic control information to minimize impacts on possible faunal species.
- 91. Road borders must be regularly maintained to ensure that vegetation remains short and that they therefore serve as an effective firebreak.
- Roads must be designed such that changes to surface water runoff are avoided and erosion is not initiated.
- 93. All construction vehicles must adhere to a low speed limit to avoid collisions with susceptible species such as snakes and tortoises.

Noise

- 94. A 1,4km buffer must be applied between the residence and the wind turbines.
- 95. The potential noise impact must be re-evaluated should the layout be changed such that any wind turbines are located closer than 1,000m from a confirmed noise sensitive area.
- 96. Routine noise measurements must be conducted during the operation of the facility and a complaints register must be opened and made available to affected parties and to the Department on request.
- 97. The holder of this authorisation must ensure that the construction staff working in areas where the 8-hour ambient noise levels exceed 75dBA wear ear protection equipment.

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- 98. The holder of this authorisation must ensure that all equipment and machinery are well maintained and equipped with silencers.
- 99. The holder of this authorisation must provide a prior warning to the community when a noisy activity e.g. blasting is to take place.
- 100. Positions of turbines jeopardizing compliance with accepted noise levels must be revised during the micro-siting of the units in question and predicted noise levels re-modelled by the noise specialist, in order to ensure that the predicted noise levels are less than 45dB(A).
- 101. Construction staff must be trained in actions to minimise noise impacts.
- 102. The holder of this authorisation must ensure that the National Noise Control Regulations and SANS10103:2008 are adhered to and measures to limit noise from the work site are implemented.

Visual resources

- 103. The holder of this authorisation must reduce visual impacts during construction by minimising areas of surface disturbance, controlling erosion, using dust suppression techniques and restoring exposed soil as closely as possible to their original contour and vegetation.
- 104. A lighting engineer must be consulted to assist in the planning and placement of light fixtures in order to reduce visual impacts associated with glare and light trespass.
- 105. Lighting of main structures (turbines) and ancillary buildings must be designed to minimise light pollution without compromising safety, and turbines must be lit according to Civil Aviation Regulations.
- 106. Signage on or near wind turbines must be avoided unless they serve to inform the public about wind turbines and their function.
- Commercial messages and graffiti on turbines are prohibited.

Human health and safety

- 108. A health and safety programme must be developed to protect both workers and the general public during construction, operation and decommissioning of the energy facility. The programme must establish a safety zone for wind turbines from residences and occupied buildings, roads, right-of-ways and other public access areas that is sufficient to prevent accidents resulting from the operation of the wind turbines.
- 109. Potential interference with public safety communication systems (e.g. radio traffic related to emergency activities) must be avoided.

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- 110. The holder of this authorisation must obtain approval from the South Africa Civil Aviation Authority that the wind facility will not interfere with the performance of aerodrome radio Communication, Navigation and Surveillance (CNS) equipment, especially the radar, prior to commencement of the activity. A copy of the approval must be kept on site by the ECO.
- 111 The holder of this authorisation must ensure that the operation of the wind facility complies with the relevant communication regulations or guidelines relating to electromagnetic interference, e.g. microwave, radio and television transmissions.
- 112. The holder of this authorisation must obtain approval from the South Africa Weather Services (WeatherSA) that the energy facility will not interfere with the performance of their equipment, especially radar, prior to commencement of the activity. A copy of the approval must be kept on site by the ECO.
- 113. The holder of this authorisation must train safety representatives, managers and workers in workplace safety. The construction process must be compliant with all safety and health measures as prescribed by the relevant act.
- 114. Liaison with land owners/farm managers must be done prior to construction in order to provide sufficient time for them to plan agricultural activities.
- 115. No unsupervised open fires for cooking or heating must be allowed on site.

Hazardous materials and waste management

- 116. Areas around fuel tanks must be bunded or contained in an appropriate manner as per the requirements of SABS 089:1999 Part 1.
- 117. Leakage of fuel must be avoided at all times and if spillage occurs, it must be remedied immediately.
- 118. Hazardous waste such as bitumen, oils, oily rags, paint tins etc. must be disposed of at an approved waste landfill site licensed to accept such waste.
- 119. No dumping or temporary storage of any materials may take place outside designated and demarcated laydown areas, and these must all be located within areas of low environmental sensitivity.
- 120. Hazardous substances must not be stored where there could be accidental leakage into surface or subterranean water.
- 121. Hazardous and flammable substances must be stored and used in compliance to the applicable regulations and safety instructions. Furthermore, no chemicals must be stored nor may any vehicle maintenance occur within 350m of the temporal zone of wetlands, a drainage line with or without an extensive floodplain or hillside wetlands.

122. Temporary bunds must be constructed around chemical storage to contain possible spills.

123. Spill kits must be made available on-site for the clean-up of spills.

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- 124. An integrated waste management approach must be implemented that is based on waste minimisation and must incorporate reduction, recycling and re-use options where appropriate. Where solid waste is disposed of, such disposal shall only occur at a landfill licensed in terms of section 20(b) of the National Environment Management Waste Act, 2008 (Act 59 of 2008).
- 125. The holder of this authorisation must provide sanitation facilities within the construction camps and along the road so that workers do not pollute the surrounding environment. These facilities must be removed from the site when the construction phase is completed as well as associated waste to be disposed of at a registered waste disposal site.
- 126. The holder of this authorisation must take note that no temporary site camps will be allowed outside the footprint of the development area as the establishment of such structures might trigger a listed activity as defined in the Environmental Impact Assessment Regulations, 2014.
- 127. The holder of this authorisation must provide sanitation facilities for the operation staff.

Excavation and blasting activities

- 128. Underground cables and internal access roads must be aligned as much as possible along existing infrastructure to limit damage to vegetation and watercourses.
- 129. Foundations and trenches must be backfilled with originally excavated materials as much as possible. Excess excavation materials must be disposed of only in approved areas or, if suitable, stockpiled for use in reclamation activities.
- 130. Borrow materials must be obtained only from authorised and permitted sites. Permits must be kept on site by the ECO.
- 131. Anti-erosion measures such as silt fences must be installed in disturbed areas.

Air emissions

- 132. Dust abatement techniques must be used before and during surface clearing, excavation, or blasting activities.
- 133. Appropriate dust suppression techniques must be implemented on all exposed surfaces during periods of high wind. Such measures may include wet suppression, chemical stabilisation, the use of a wind fence, covering surfaces with straw chippings and re-vegetation of open areas.

Historical / cultural / paleontological resources

It is hereby certified that this is a true copy of the original document and that there is no indication that any afterations have been made thereto by an unauthorised person.

24 1 2 MAR 2019 COMMISSIONER OF OATHS (RSA)
JULIAN JCHNSON CA (SA)
Bullding 1, The Design Quarter District
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- 134. As the shale of the Dwyka Group can contain significant fossils, at the start of construction in areas underlain by this group, a Palaeontologist must be appointed to ensure that no significant fossils are damaged.
- 135. A 500m no-go buffer must be maintained around the two historic sites indicated on the Paleontological sensitivity map and database.
- 136. Sites ALE 4 and ALE 36 must be monitored during construction as they are close to turbine construction activities. Monitoring reports thereto must be submitted to SAHRA upon completion of construction activities.
- 137. Should construction activities be within 100 metres from archaeological sites and historical sites, the sites must be demarcated and fenced off.
- 138. A 30m no-go buffer must be applied around identified burial grounds. Should it not be possible to retain the burial grounds in situ, a consultation process in terms of Section 36 of the NHRA and Chapter XI of the NHRA Regulations be undertaken.
- 139. If concentrations of archaeological heritage material, fossils and human remains are uncovered during construction, all work must cease immediately and be reported to the South African Heritage Resources Agency (SAHRA) so that a systematic and professional investigation / excavation can be undertaken.
- 140. Construction managers/foremen must be informed before construction starts of the possible types of heritage sites and cultural material that may be encountered and the procedures to follow when they find sites.
- 141. All buffers and no-go areas stipulated in the EIAr must be adhered to for both the facilities and all roads and powerlines.
- 142. All construction and maintenance crew and vehicles (except small vehicles which may use existing farm tracks) must be kept out of the buffer zones.
- 143. The final layout must be shown to the appointed archaeologist before implementation to confirm that all significant heritage resources have been adequately protected.

General

- 144. The recommendations of the EAP in the EIAr dated January 2017 and the specialist studies attached must be adhered to. In the event of any conflicting mitigation measures and conditions of the Environmental Authorisation, the specific condition of this Environmental Authorisation will take preference.
- 145. A copy of this environmental authorisation, the audit and compliance monitoring reports, and the approved EMPr, must be made available for inspection and copying the original document and that there is no

the original document and that there is no indication that any effections bere been made thereto by an unauthorized person.

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JULIAN JOHNSON CATHA

Building 1, The Design Quarter District Leslie Avenue East, FOURWAYS

- 145.1. at the site of the authorised activity;
- 145.2. to anyone on request; and
- 145.3. where the holder of the environmental authorisation has a website, on such publicly accessible website.
- 146. 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 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.

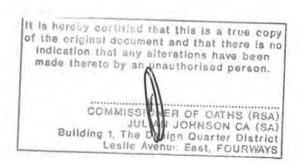
Date of environmental authorisation: 09/05/2017

Mr Sabelo Malaza

Chief Director: Integrated Environmental Authorisations

Department of Environmental Affairs

1 2 MAR 2019



Annexure 1: Reasons for Decision

1. Information considered in making the decision

In reaching its decision, the Department took, inter alia, the following into consideration -

- a) The listed activities as applied for in the amended application form received on 27 January 2017.
- The information contained in the EIAr dated January 2017.
- c) The comments received from SKA-SA, Air Traffic Navigation Services (ATNS), Eskom, SANRAL, SENTECH, SAHRA, Birdlife SA, the Department of Agriculture, Forestry and Fisheries, the Department of Water and Sanitation, Siyathemba Local Municipality, Endangered Wildlife Trust, Telkom-SA and Interested and Affected Parties as included in the ElAr dated January 2017.
- d) Mitigation measures as proposed in the EIAr and the EMPr.
- e) The information contained in the specialist studies contained within the appendices of the ElAr dated January 2017 and as appears below:

Title	Pr	Date	
Ecological Impact Assessment	David Hoare Consu	January 2017	
Avifaunal Impact Assessment	Chris Van Rooyen C	August 2016	
Bat Impact Assessment	Animalia Zoological	November 2016	
Surface Water Assessment	Sivest Environment by Kyllinga Consulti	January 2017	
Soils and Agricultural assessment	ARC	January 2017	
Noise Impact assessment	Jongens Keet Assoc	September 2016	
Visual Impact Assessment	Sivest Environment by SRK Consulting	October 2017	
Heritage Impact Assessment	PGS Heritage	November 2016	
Social Impact Assessment	Urban-Econ Development Economists		January 2017
Traffic Assessment	BVI Consulting Engineers		September 2016
Path Loss and Risk Assessment Report (including Emission Control			September 2016
Plan)		It is hereby certified that	fus is a true copy
	4 7 MAD 2010	Indication that any alters	hd that there is no iffons have been

1 2 MAR 2019

COMMISSIONER OF CATHE (DEA

Key factors considered in making the decision 2.

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All information presented to the Department was taken into account in the Department's consideration. FOURWAYS of the application. A summary of the issues which, in the Department's view, were of the most significance is set out below. 1 2 MAR 2019

- The findings of all the specialist studies conducted and their recommended mitigation measures a)
- The need for the proposed project stems from the provision of electricity to the national grid. b)
- The EIAr dated January 2017 identified all legislation and guidelines that have been considered c) in the preparation of the ElAr dated January 2017.
- The location of turbines as presented in the final EIAr. d)
- The location of the proposed development within the Karoo Central Astronomy Area and the e) significance of identified impacts to the Square Kilometre Array South Africa (SKA-SA).
- Concerns raised and comments provided by the SKA-SA on the findings of the Path Loss and f) Risk Assessment Report (including Emission Control Plan) study dated September 2016 and submitted as part of the EIAr dated January 2017.
- The methodology used in assessing the potential impacts identified in the ElAr dated January g) 2017 and the specialist studies have been adequately indicated.
- A sufficient public participation process was undertaken and the applicant has satisfied the h) minimum requirements as prescribed in the EIA Regulations, 2014 for public involvement.

3. **Findings**

After consideration of the information and factors listed above, the Department made the following findings -

- The identification and assessment of impacts are detailed in the EIAr dated January 2017 and a) sufficient assessment of the key identified issues and impacts have been completed.
- The procedure followed for impact assessment is adequate for the decision-making process. b)
- The information contained in the EIAr dated January 2017 is deemed to be accurate and c) credible.
- The findings of the site inspection held on 30 March 2017. d)
- Only a wind turbine generator with the following specifications is authorised: An Acciona AW 125 e) TH 100A with a 100m hub height, 125m rotor diameter and a 3MW output.
- Should a different turbine generator be selected, the applicant is advised to apply for an f) amendment to the EA in terms of the EIA Regulations, relevant at the time, as well as undertake

- a new path loss and risk assessment (including a revised EMC control plan) to the satisfaction of SKA-SA.
- g) The proposed mitigation of impacts identified and assessed adequately curtails the identified impacts.
- h) EMPr measures for the pre-construction, construction and rehabilitation phases of the development were proposed and included in the EIAr and will be implemented to manage the identified environmental impacts during the construction phase.

In view of the above, the Department is satisfied that, subject to compliance with the conditions contained in the environmental authorisation, the authorised activities will not conflict with the general objectives of integrated environmental management laid down in Chapter 5 of the National Environmental Management Act, 1998 and that any potentially detrimental environmental impacts resulting from the authorised activities can be mitigated to acceptable levels. The environmental authorisation is accordingly granted.

1 2 MAR 2019

It is hereby certified that this is a true copy of the original document and that there is no indication that any alterations have been made thereto by an Anauthorised person.

COMMISSIONER OF OATHS (RSA)

JULIAN JOHNSON CA (SA)

Building 1, The Vesign Quarter District Lesile Avenue East, FOURWAYS



Appendix B **AUTHORITY CONSULTATION**



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

DEA Reference: 14/12/16/3/3/2/945/AM1
Enquiries: Ms Azrah Essop
Telephone: (012) 399 8529 E-mail: AEssop@environment.gov.za

Andrea Gibb SiVEST SA (Pty) Ltd P.O. Box 2921 RIVONIA 2128

Telephone Number: (011) 798 0600

Email Address: andreag@sivest.co.za

PER EMAIL / MAIL
Dear Ms Gibb

ACKNOWLEDGEMENT OF RECEIPT OF APPLICATION FOR AMENDMENT OF ENVIRONMENTAL AUTHORISATION ISSUED ON 09 MAY 2017 FOR THE ALETTA WIND ENERGY FACILITY AND ITS ASSOCIATED INFRASTRUCTURE NEAR COPPERTON WITHIN THE SIYATHEMBA LOCAL MUNICIPALITY IN THE NORTHERN CAPE PROVINCE

The Department confirms having received your application for amendment of the environmental authorisation (EA) on the 11 April 2019.

Following further review of your application for amendment of EA, the Department has come to the conclusion that your application for amendment of EA falls within the ambit of amendments to be applied for in terms of Part 2 of Chapter 5 of the Environmental Impact Assessment (EIA) Regulations, 2014, as amended. The reason for the above is:

Regulation 31 (Part 2 Amendments) of the EIA regulations states that "An environmental authorisation may be amended by following the process prescribed in this Part if the amendment will result in a change to the scope of a valid environmental authorisation where such change will result in an increased level or nature of impact where such level or nature of impact was not-

- (a) assessed and included in the initial application for environmental authorisation; or
- (b) taken into consideration in the initial environmental authorisation;"

Based on the information provided in the submitted application for amendment, the proposed application for amendment seeks to include, as part of the EA with DEA Ref No. 14/12/16/3/3/2/945 the following:

 The change in the turbine specification- Amendment to the authorised hub height, rotor diameter and generation capacity for the wind turbine.

Having reviewed the submitted documents and taking the above-mentioned into consideration, the Department hereby notifies you that the proposed changes to EA 14/12/16/3/3/2/945 are therefore considered a change of scope.

As such, you are therefore referred to regulation 32 of GN R. 982. You are requested to submit the following documents within 90 days of the receipt of this application by the competent authority, as per regulation 32(1) (a) of GN R. 982:

- a report, reflecting:
 - (i) an assessment of all impacts related to the proposed change;
 - (ii) advantages and disadvantages associated with the proposed change; and
 - (iii) measures to ensure avoidance, management and mitigation of impacts associated with such proposed change; and
 - (iv) any changes to the EMPr.

In addition to the abovementioned, you are required to inform all potential and registered interested and affected parties, including organs of state which have jurisdiction in respect of any aspect of the relevant activity, of the required amendments. Interested and affected parties and relevant organs of state must be given 30 days to comment on the draft report compiled in terms of regulation 32(1)(a) of GN R. 982. Comments received during the commenting period must be incorporated into a final report to be submitted to the competent authority for decision-making.

Should there be significant changes or new information that has been added to the report after the initial commenting period, you are therefore required to comply with regulation 32(1)(b) of GN R. 982 which states:

"The applicant must within 90 days of receipt by the competent authority of the application made in terms of regulation 31, submit to the competent authority—a notification in writing that the report will be submitted within 140 days of receipt of the application by the competent authority, as significant changes have been made or significant new information has been added to the report, which changes or information was not contained in the report consulted on during the initial public participation process contemplated in subregulation (1)(a) and that the revised report will be subjected to another public participation process of at least 30 days."

In the event where regulation 32(1)(b) of GN R. 982 applies, the report, which reflects the incorporation of comments received, including any comments of the competent authority, must be submitted to the competent authority within 140 days of receipt of the application by the competent authority.

You are also advised that the Public Participation Process must be conducted as outlined in Chapter 6 of the EIA Regulations, 2014, as amended.

Should you fail to meet any of the timeframes stipulated in regulation 32 of Part 2 of Chapter 5 of the Environmental Impact Assessment Regulations, 2014, as amended, your application will lapse.

Yours sincerely

Mr Sabelo Malaza

Chief Director: Integrated Environmental Authorisations

Department of Environmental Affairs: Letter signed by: Ms Azrah Essop

Designation: Environmental Officer Specialised Production: Strategic Infrastructure Developments

Date: 23/4/2019

CC: Jasandra Nyker BioTherm Energy (Pty) Ltd Email: eiaadmin@biothermenergy.com



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

DEA Reference: 14/12/16/3/3/2/945/AM1 Enquiries: Julliet Mahlangu

Tel: 012 399 9320E-mail: jmmahlangu@env/ironment.gov.za

Andrea Gibb SiVEST Environmental P O Box 2921 RIVONIA 2128

Tei: 011 798 0600 Email: info@sivest.co.za

PER EMAIL / MAIL

Dear Sir/Madam

ACKNOWLEDGEMENT OF RECEIPT OF THE DRAFT AMENDMENT REPORT FOR THE PROPOSED 140MW WIND ENERGY NEAR COPPERTON, NORTHERN CAPE PROVINCE

The Department confirms having received the Draft Amendment Report for the abovementioned project on 03 June 2019. We further confirm that you have submitted these documents to comply with the National Environmental Management Act, 1998 (Act No. 107 of 1998) Environmental Impact Assessment Regulations, 2014 published under Government Notice R982 in Government Gazette No. 38282 dated 04 December 2014, as amended ('the EIA Regulations, 2014').

Please take note of Regulation 40(3) of the EIA Regulations, 2014, which states that potential Interested & Affected Parties, including the Competent Authority, may be provided with an opportunity to comment on reports and plans contemplated in Regulation 40(1) of the EIA Regulations, 2014, as amended, prior to the submission of an application but must be provided an opportunity to comment on such reports once an application has been submitted to the Competent Authority.

All documentation delivered to the physical address contained in this form must be delivered during the official Departmental Office Hours which is visible on the Departmental gate.

EIA related documents (includes application forms, reports or any EIA related submissions) that are faxed; emailed; delivered to Security or placed in the Departmental Tender Box will not be accepted.

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

Kindly quote the abovementioned reference number in any future correspondence in respect of the application.

Yours sincerely

Mr Sabelo Malaza

Chief Director: Integrated Environmental Authorisations

Department of Environmental Affairs

Letter signed by: Ms Toinette van der Merwe

Designation: Control Environmental Officer: EIA Systems and Tools

Date: 12/6/2019



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

DEA Reference: 14/12/16/3/3/2/945/AM1 Enquiries: Ms Azrah Essop

Telephone: (012) 399 8529 E-mail: AEssop@environment.gov.za

Ms Andrea Gibb SiVEST SA (Pty) Ltd P.O. Box 2921 RIVONIA 2128

Telephone Number: (011

(011) 798 0600

Email Address:

andreag@sivest.co.za

PER MAIL / E-MAIL

Dear Ms Gibb

COMMENTS ON THE DRAFT AMENDMENT REPORT FOR THE APPLICATION FOR AMENDMENT OF ENVIRONMENTAL AUTHORISATION ISSUED ON 09 MAY 2017 FOR THE ALETTA WIND ENERGY FACILITY AND ITS ASSOCIATED INFRASTRUCTURE NEAR COPPERTON WITHIN THE SIYATHEMBA LOCAL MUNICIPALITY IN THE NORTHERN CAPE PROVINCE

The Environmental Authorisation (EA) issued for the above application by this Department on 09 May 2017 (14/12/16/3/3/2/945); the Application for Environmental Authorisation received by the Department on 11 April 2019; the acknowledgement letter from the Department dated 23 April 2019; and the Draft Amendment report received by the Department on the 03 June 2019, refer.

The application for amendment of the EA addresses the following:

- a) The applicant, BioTherm Energy (Pty) Ltd, was initially authorised for '60 wind turbines with a total output of 140MW. Turbines will have a hub height of 100m, a rotor diameter of 125m and a generation output of 3MW each'.
- b) The applicant now intends using a larger turbine for the development, namely the Acciona AW 140/3465 TH 120 with a hub height of 120m and a rotor diameter of 140m and is therefore applying for an amendment to the existing EA to increase the approved hub height of 100m and rotor diameter of 125m.
- c) Ten out of the eleven specialist studies undertaken during the original EIA process all considered the impacts of turbines with a maximum hub heights of 120m and with maximum rotor diameters of 150m. Therefore, the mitigations and recommendations of the specialist studies remain valid for this amendment application.
- d) The Electromagnetic Interference Path Loss and Risk Assessment (Including Emission Control Plan (ECP)) undertaken during the original EIA process considered the Acciona AW 125 TH 100A, with a hub height of 100m and a rotor diameter of 125m. Since the application was lodged, the ECP has been updated and included for comment with amendment report.

The Department has the following comments on the abovementioned application:

(a) Public Participation Process

The following information must be submitted with the Final Amendment Report:

- A list of registered interested and affected parties as per Regulation 42 of the NEMA EIA Regulations, 2014, as amended;
- Please ensure that copies of original comments received from I&APs and organs of state, which
 have jurisdiction in respect of the proposed activity are submitted to the Department with the final
 Amendment Report. Kindly ensure that the Square Kilometer Array (SKA) comments are included
 in the document.
- Proof of correspondence with the various stakeholders, including organs of state which have jurisdiction in respect of the proposed activity, must be included in the final Amendment Report. Should you be unable to obtain such comments, proof should be submitted to the Department of the attempts that were made to obtain the comments.
- All issues raised and comments received during the circulation of the draft Amendment Report from I&APs and organs of state which have jurisdiction in respect of the proposed activity are adequately addressed in the final Amendment Report, including comments from this Department, and must be incorporated into a Comments and Response Report;
- Please refrain from summarising comments made by I&APs. All comments from I&APs must be copied verbatim and responded to clearly. Please note that a response such as "noted" is not regarded as an adequate response to an I&AP's comments

(b) General

You are requested to submit one (1) unprotected electronic copy (1 CD/DVD/USB) and one (1) hard copy of the final Amendment Report to the Department. Please ensure that this copy contains an electronic version of the amendment application form.

You are also advised to comply with the requirements of the Regulations 32 of the EIA Regulations 2014, as amended.

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

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

Yours sincerely

Mr Sabelo Malaza

Chief Director: Integrated Environmental Authorisations

Department of Environmental Affairs Letter signed by: Mr Wayne Hector

Designation: Deputy Director: Prioritised Infrastructure Projects

Date: 28/06/10

CC: Jasandra Nyker

BioTherm Energy (Pty) Ltd

Email: eiaadmin@biothermenergy.com



Appendix C PUBLIC PARTICIPATION



Appendix C1 PROOF OF WRITTEN NOTIFICATION



KENNISGEWING VAN 'N AANSOEK OM WYSIGING VAN 'N OMGEWINGSMAGTIGING

BEOOGDE ONTWIKKELING VAN DIE ALETTA 140 MW WINDKRAGAANLEG (WEF) EN GEPAARDGAANDE INFRASTRUKTUUR NABY COPPERTON, NOORD-KAAPPROVINSIE

DO-verw. No.: 14/12/16/3/3/2/945/AM1

PROJEKINLIGTING

Ingevolge die Nasionale Wet op Omgewingsbestuur, 1998 (Wet 107 van 1998) (NEMA) (soos gewysig) en die Regulasies op Omgewingsimpakevaluerings (OIE-regulasies), 2014 (soos gewysig), geskied kennisgewing hiermee dat BioTherm Energy (Edms.) Bpk. (hierna BioTherm genoem) SiVEST SA (Edms.) Bpk. aangestel het as die onafhanklike Omgewingsevalueringspraktisyn (OEP) om aansoek te doen om 'n Wysiging van die Omgewingsmagtiging (OM) vir die bogenoemde projek.

Op 9 Mei 2017 is 'n OM aan BioTherm uitgereik vir die beoogde ontwikkeling van die 140 MW Aletta Windkragaanleg (WEF) en gepaardgaande infrastruktuur naby Copperton in die Noord-Kaapprovinsie (DO-verw. No.: 14/12/16/3/3/2/945).

Die wysiging van die OM word benodig om die goedgekeurde turbine-afmetings te vergroot om 'n naafhoogte van 120 m, 'n rotordeursnee van 140 m en 'n opwekkingsuitset van 3,465 MW elk te hê. Die beoogde turbine-afmetings val in die spesifikasies wat tydens die OIE-proses geëvalueer is. Die Departement van Omgewingsake (DO) het die aansoek om die wysiging van die OM op 11 April 2019 ontvang. Na 'n oorsig van die aansoek om wysiging vir die OM, het die DO tot die slotsom gekom dat die aansoek in die bestek van wysigings val waarvoor aansoek gedoen word ingevolge Deel 2 van Hoofstuk 5 van die OIE-regulasies, 2014 (soos gewysig) en derhalwe moet 'n verslag aan alle belangstellende en geaffekteerde partye (B&GP's) en tersaaklike staatsinstansies beskikbaar gestel word.

PROJEKLIGGING

Die beoogde projek is in die Noord-Kaapprovinsie geleë. Dit val in die Siyathemba Plaaslike Munisipaliteit van die Pixley ka Seme Distrikmunisipaliteit. Die beoogde projek is sowat 20 km oos van Copperton geleë. Die WEF-projek sluit die volgende plase in:

- Gedeelte 1 van Drielings Pan No. 101;
- Gedeelte 2 van Drielings Pan No. 101;
- Gedeelte 3 van Drielings Pan No. 101; en
- die Restant van Drielings Pan No. 101.

BESKIKBAARHEID VAN DIE KONSEP MOTIVERINGSVERSLAG VIR WYSIGING VIR INSAE

Die Konsep Motiveringsverslag vir Wysiging vir die WEF sal vanaf Maandag 03 Junie 2019 tot Vrydag 05 Julie 2019 (teen sluitingstyd) op SiVEST se webwerf (http://www.sivest.co.za/, kliek op *Downloads* en soek dan vir die legger '15499 Aletta WEF Amendment') beskikbaar gestel word vir openbare insae. As u 'n elektroniese kopie van die Konsep Motiveringsverslag vir Wysiging (op CD) wil ontvang, moet u u versoek asseblief skriftelik aan die onderstaande Konsultante rig.

Om as 'n B&GP te registreer en/of om meer inligting te bekom, moet u asseblief u naam, kontakbesonderhede en die belang wat u by die aansoek het by SiVEST indien by die kontakbesonderhede hieronder:

Stephan Jacobs of Hlengiwe Ntuli

SiVEST Environmental

Posbus 2921 Tel: 011 798 0600 RIVONIA Faks: 011 803 7272

2128 E-pos: sivest ppp@sivest.co.za

Webwerf: www.sivest.co.za



NOTIFICATION OF AN APPLICATION TO AMEND AN ENVIRONMENTAL **AUTHORISATION**

PROPOSED DEVELOPMENT OF THE ALETTA 140MW WIND ENERGY FACILITY (WEF) AND ASSOCIATED INFRASTRUCTURE NEAR COPPERTON, NORTHERN CAPE PROVINCE

DEA Ref. No.:14/12/16/3/3/2/945/AM1

PROJECT INFORMATION

In terms of the National Environmental Management Act, 1998 (Act No. 107 of 1998) (NEMA) (as amended) and the Environmental Impact Assessment (EIA) Regulations, 2014 (as amended) notice is hereby given that BioTherm Energy (Pty) Ltd (hereafter referred to as BioTherm) have appointed SiVEST SA (Pty) Ltd, as the independent Environmental Assessment Practitioner (EAP), to apply for an Amendment of the Environmental Authorisation (EA) for the above mentioned project.

BioTherm was issued with an EA for the proposed development of the 140MW Aletta Wind Energy Facility (WEF) and its associated infrastructure near Copperton in the Northern Cape Province on 9 May 2017 (DEA Ref. No.: 14/12/16/3/3/2/945).

The amendment to the EA is required to increase the authorised turbine dimensions to have a hub height of 120m,a rotor diameter of 140m and a generation output of 3.465MW each. The proposed turbine dimensions are within the specifications assessed during the EIA process. The application for the amendment of the EA was received by the Department of Environmental Affairs (DEA) on 11 April 2019. Following a review of the application for an amendment for the EA, the DEA concluded that the application falls within the ambit of amendments applied for in terms of Part 2 of Chapter 5 of the EIA Regulations, 2014 (as amended) and therefore a report needs to be made available to all interested and affected parties (I&APs) and relevant organs of state.

PROJECT LOCATION

The proposed project is located within the Northern Cape Province. It fall within the Siyathemba Local Municipality of the Pixley ka Seme District Municipality. The proposed project is located approximately 20km east of Copperton. The WEF project includes the following farms:

- Portion 1 of Drielings Pan No.101
- Portion 2 of Drielings Pan No.101
- Portion 3 of Drielings Pan No.101
- Remainder of Drielings Pan No.101

AVAILABILITY OF THE DRAFT MOTIVATION AMENDMENT REPORT FOR REVIEW

The Daft Motivation Amendment Report for the WEF will be made available for public review as from Monday 03 June 2019 until Friday 05 July 2019 (end of business day) on the SiVEST website (http://www.sivest.co.za/, click on Downloads, then browse to the folder '15499 Aletta WEF Amendment'. Should you wish to receive an electronic copy of the Draft Motivation Amendment Report (on CD) please forward your request in writing to the Consultants below.

To register as an I&AP and / or to obtain additional information please submit your name, contact details and the interest which you have in the application to SiVEST as per the details below:

Stephan Jacobs or Hlengiwe Ntuli

SiVEST Environmental

P O Box 2921 Tel: (011) 798 0600 RIVONIA Fax: (011) 803 7272

2128 E-mail:sivest_ppp@sivest.co.za

Website: www.sivest.co.za



SITE NOTICES (ENGLISH AND AFRIKAANS) ERECTED AT THE ENTRANCE GATE OF REMAINDER OF THE FARM DRIELINGS PAN NO. 101

GPS COORDINATES:

\$29°54'31.02"; E22°31'44.44"



From: sivest_PPP

Sent: 03 June 2019 03:31 PM

Andrea Gibb; Stephan Jacobs; 'Sandhisha Narain' Cc:

Recipient

Andrea Gibb Stephan Jacobs

'Sandhisha Narain'

Subject: Aletta WEF Amendment: Draft EA Amendment Motivation Report Comment Period Starting

Tracking:

Delivered: 2019/06/03 03:31 PM

Delivery

Delivered: 2019/06/03 03:31 PM

Read

Read: 2019/06/03 09:31 PM Read: 2019/06/03 06:38 PM

'Abe Abrahams' 'Nicole Abrahams'

'Carolyn Ah Shene-Verdoorn'

'Candice Stevens' 'Albert Basin Druwie' 'Albertus Vermeulen' 'Aletta De Jager' 'Alexander Cloete' 'Adriaan Tiplady' 'G Bams'

'Betty Titus' 'Benito Williams' 'Berend van Deventer'

'Ruben Lubbe' 'Brian Fisher' 'Chon Beukes' 'Rene De Kock' 'Deon Human' 'Shaun Dyers' 'Elmary Botha'

'Samantha Ralston-Paton' 'ET Segwabe'

'Emarentia Devos'

'Ernstine Louw' 'Eva Adams' 'Evert Burger' 'Sindisile Madyo' 'Ferlicia Ward' 'Frank Andreas'

'Piet Papier' 'Sam Fiff' 'Vivian Skethers' 'F M Van Wyk'

'John Geeringh'

'Gerhard Van Wyk' 'Dirk van Wyk' 'Giel MacDonald' 'Gloria Speelman' 'Graham Mondzinger'

'Gregory MacKay' 'Vivian Groenewald' 'Heinrich Visser' 'Henning Myburg' 'Hettie Morobisi' 'Hettie Buys'

'HG Human' 'Alexia Hlengani' 'Howard Tsume'

'Danie & Jomima Bernard'

'Wynand Human' 'Hester Meyer' 'Isaac Gwija' 'Ihlaam Peters' 'Isaac Phooko' 'Jacoline Mans'

'Jakob Basson'

'Jiyana Tsheye'

'Johanna Morobane'

'Johan Badenhorst'

'Johannes Wolmarans'

'Thandeka Yawa'

'Imelda Julies'

'Garth Julius'

'Kate Katane'

'Johan Koegelenberg'

'Ernest Kubayi'

'L Kakora'

'Wilson Bosman'

'Lourens Leeuwner'

'Lu-Whelin Vass'

'Moses Mahunonyane'

'Malizo Maliwa'

'Mandisa Yawa'

'Marizan Beukes'

'Mashudu Mukoma'

'Mashudu Marubini'

'Melanie Miles'

'Michelle Botha'

'Abrie Smit'

'IWJ Stadhouer'

'Beatrice Mondzinger'

'Kevin Mutheiwana'

'William van Staden'

'Lerato Mokhoantle'

'Jane Molepo'

'Morgan Griffiths'

'Mmatlala Rabothata'

'T Jooste'

'Pieter Fourie'

'Nico Fourie'

'Natasha Higgitt' 'Nicolene Venter'

'Lorraine Nobela'

'Ntsundeni Ravhogoni'

'Simphiwe Masilela'

'Lizell Stroh'

'Onwabile Ndzumo'

'Phillip Hine'

'Sam Diokpala'

'Miriam Kibi'

'Jack Maccollan'

'Patrick Lenyibi' 'Elizabeth Martin'

'Leonardo Raats'

'Andrew Timothy'

'Jaco Roelofse'

'Ben Lehlohonolo Roestof'

'Sanda De Jager'

'Kruno Miletic'

'Johannes Van Schalkwyk'

'Seoka Lekota'

'Selaelo Matlhane'

'Sonwabile Nkondeshe'

'Sonwabile Nkondeshe'

'Sonia Miszczak'

'Edwin Horn'

'Candice Spammer'

'Ertjies Taljaart'

'Thoko Buthelezi'

'Thys van der Hout'

Delivery Recipient Read 'Thulani Mthombeni' 'Toni Cahi' 'Olwethu Tshekela' 'Heleen van den Heever' 'Amanda Bester' 'Frans van Wyk' 'BG Van Zyl' 'atimothy@nc.sahra.org.za' 'ruth.cuttings@yahoo.com' 'theodoracburger@gmail.com' 'Mpho Sebole' 'vanwykdirk62@gmail.com' 'mr.gwija@gmail.com' 'juliayewa@gmail.com' 'malimamalizo@gmail.com' 'William van Staden' 'Jasper Nieuwoudt' 'molepojane.mp@gmail.com' 'Lizell Stroh'

Dear Interested and/or Affected Party,

APPLICATION TO AMEND AN ENVIRONMNETAL AUTHORISATION FOR THE PROPOSED DEVELOPMENT OF THE ALETTA 140MW WIND ENERGY FACILITY (WEF) NEAR COPPERTON, NORTHERN CAPE PROVINCE

DEA Ref. No.:14/12/16/3/3/2/945/AM1

'kmotlhomi@ncpg.gov.za'

'Ihlaam Peters'
'Thulani Mthombeni'

Please note that SiVEST SA (Pty) Ltd has been appointed by BioTherm Energy (Pty) Ltd (hereafter referred to as BioTherm) as the independent Environmental Assessment Practitioner (EAP) for the abovementioned project to apply for an Amendment of the Environmental Authorisation (EA) (Reference: 14/12/16/3/3/2/945/AM1).

BioTherm was issued with an EA for the proposed development of the 140MW Aletta Wind Energy Facility (WEF) and its associated infrastructure near Copperton in the Northern Cape Province on 9 May 2017 (DEA Reference 14/12/16/3/3/2/945).

The amendment to the EA is required to increase the authorised turbine dimensions to have a hub height of 120m, a rotor diameter of 140m and a generation output of 3.465MW each. The proposed turbine dimensions are within the specifications assessed during the EIA process. The application for an amendment of the EA was received by the Department of Environmental Affairs (DEA) on 11 April 2019. Following a review of the application for amendment for the EA, the DEA concluded that the application falls within the ambit of amendments applied for in terms of Part 2 of Chapter 5 of the EIA Regulations, 2014 (as amended) and therefore a Draft EA Amendment Motivation report needs to be made available to all interested and affected parties (I&APs) and relevant organs of state.

We would like to take this opportunity to inform you that, in accordance with the National Environmental Management Act, 1998 (Act No. 107 of 1998) (NEMA) (as amended) and the Environmental Impact Assessment (EIA) Regulations, 2014 (as amended) the Draft EA Amendment Motivation Report will be available for public review as from **Monday 3 June 2019 to Friday 5 July 2019** (end of business day). The report will be available on the SiVEST website (http://www.sivest.co.za/, click on Downloads, then browse to the folder '15499 Aletta WEF Amendment'. Should you wish to receive an electronic copy of the Draft EA Amendment Motivation Report (on CD) or have any enquiries please forward your request in writing to the Consultants below.

Stephan Jacobs or Hlengiwe Ntuli

PO BOX 2921, Rivonia, 2128 Tel – (011) 798 0600 Fax – (011) 803 7272 Email – sivest_ppp@sivest.co.za

We would like to thank you in anticipation of your active and meaningful contribution to the Amendment and Public Participation process.

Geagte Belangstellende en/of Geaffekteerde Party

AANSOEK OM WYSIGING VAN 'N OMGEWINGSMAGTIGING VIR DIE BEOOGDE ONTWIKKELING VAN DIE ALETTA 140 MW WINDKRAGAANLEG (WEF) NABY COPPERTON, NOORD-KAAPPROVINSIE

DO-verw. No.: 14/12/16/3/3/2/945/AM1

Neem asseblief kennis dat SiVEST SA (Edms.) Bpk. deur BioTherm Energy (Edms.) Bpk. (hierna BioTherm genoem) aangestel is as die onafhanklike Omgewingsevalueringspraktisyn (OEP) vir die bogenoemde projek om aansoek te doen om 'n Wysiging van die Omgewingsmagtiging (OM) (Verwysing: 14/12/16/3/3/2/945/AM1).

Op 9 Mei 2017 is 'n OM aan BioTherm uitgereik vir die beoogde ontwikkeling van die 140 MW Aletta Windkragaanleg (WEF) en gepaardgaande infrastruktuur naby Copperton in die Noord-Kaapprovinsie (DO-verwysing 14/12/16/3/3/2/945).

Die wysiging van die OM word benodig om die goedgekeurde turbine-afmetings te vergroot om 'n naafhoogte van 120 m, 'n rotordeursnee van 140 m en 'n opwekkingsuitset van 3,465 MW elk te hê. Die beoogde turbine-afmetings val in die spesifikasies wat tydens die OIE-proses geëvalueer is. Die Departement van Omgewingsake (DO) het die aansoek om die wysiging van die OM op 11 April 2019 ontvang. Na 'n oorsig van die aansoek om wysiging vir die OM, het die DO tot die slotsom gekom dat die aansoek in die bestek van wysigings val waarvoor aansoek gedoen word ingevolge Deel 2 van Hoofstuk 5 van die OIE-regulasies, 2014 (soos gewysig) en derhalwe moet 'n verslag aan alle belangstellende en geaffekteerde partye (B&GP's) en tersaaklike staatsinstansies beskikbaar gestel word.

Ons maak graag van hierdie geleentheid gebruik om u in te lig dat die Konsep Motiveringsverslag vir Wysiging ingevolge die Nasionale Wet op Omgewingsbestuur, 1998 (Wet 107 van 1998) (NEMA) (soos gewysig) en die Regulasies op Omgewingsimpakevaluerings (OIE-regulasies), 2014 (soos gewysig), vanaf Maandag 3 Junie 2019 tot Vrydag 5 Julie 2019 (teen sluitingstyd) beskikbaar sal wees vir openbare insae. Die verslag sal beskikbaar wees op SiVEST se webwerf (http://www.sivest.co.za/, kliek op *Downloads* en soek dan vir die legger '15499 *Aletta WEF Amendment*'.) As u 'n elektroniese kopie van die Konsep Motiveringsverslag vir Wysiging (op CD) wil ontvang, of as u enige navrae het, moet u u versoek asseblief skriftelik aan die onderstaande Konsultante rig.

Stephan Jacobs of Hlengiwe Ntuli

POSBUS 2921, Rivonia, 2128 Tel: 011 798 0600 Faks: 011 803 7272

E-pos: sivest_ppp@sivest.co.za

Ons dank u by voorbaat vir u aktiewe en waardevolle bydrae tot die Wysigings- en Openbare Deelnameproses.

Vriendelike groete

Andrea Gibb Senior Manager **SiVEST Environmental Division**





SiVEST is a Level 3 BBBEE Contributor

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Engineering Consulting | Project Management | Environmental Consulting | Town & Regional Planning | Management Systems Consulting Durban | Johannesburg | Pretoria | Pietermaritzburg | Richards Bay | Port Louis (Mauritius)

Wesselstraat 51, Rivonia Posbus 2921, Rivonia 2128 Gauteng, Suid-Afrika Tel +27 11 798 0600 Faks +27 11 803 7272 E-pos info@sivest.co.za www.sivest.co.za



U verwysing: 14/12/16/3/3/2/945/AM1

Ons verwysing: 15499 – Aletta

Datum: 3 Junie 2019

Geagte Belangstellende en/of Geaffekteerde Party

AANSOEK OM WYSIGING VAN 'N OMGEWINGSMAGTIGING VIR DIE BEOOGDE ONTWIKKELING VAN DIE ALETTA 140 MW WINDKRAGAANLEG (WEF) NABY COPPERTON, NOORD-KAAPPROVINSIE

DO-verw. No.: 14/12/16/3/3/2/945/AM1

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Stephan Jacobs of Hlengiwe Ntuli

POSBUS 2921, Rivonia, 2128

Tel: 011 798 0600 Faks: 011 803 7272

E-pos: sivest_ppp@sivest.co.za

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Vriendelike groete

Andrea Gibb Afdelingsbestuurder SiVEST Environmental

Offices: South Africa Durban, Johannesburg, Pretoria, Pietermaritzburg, Richards Bay
Africa Port Louis (Mauritius)







51 Wessel Road, Rivonia PO Box 2921, Rivonia 2128 Gauteng, South Africa Phone + 27 11 798 0600 Fax + 27 11 803 7272 Email info@sivest.co.za www.sivest.co.za



Your reference: 14/12/16/3/3/2/945/AM1

Our reference: 15499 - Aletta

Date: 03 June 2019

Dear Interested and/or Affected Party,

APPLICATION TO AMEND AN ENVIRONMNETAL AUTHORISATIONFOR THE PROPOSED DEVELOPMENT OF THE ALETTA 140MW WIND ENERGY FACILITY (WEF) NEAR COPPERTON, NORTHERN CAPE PROVINCE

DEA Ref. No.:14/12/16/3/3/2/945/AM1

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We would like to thank you in anticipation of your active and meaningful contribution to the Amendment and Public Participation process.

Kind Regards,

Andrea Gibb Divisional Manager

SiVEST Environmental

Offices: South Africa Durban, Johannesburg, Pretoria, Pietermaritzburg, Richards Bay

Africa Port Louis (Mauritius)







D) Project Number:
15499
13433
Post Office Stamp: 0 3 JUN 2019 Tracking Number:
Project Number: 15499
Post Office Stamp:
0 3 JUN 2019 Tracking Number:
Project Number:
Post Office Stamp:
0 3 JUN 2019 Tracking Number:

EA AMENDMENT MOTIVATION REPORT - IAP

Trace and Track Parcel (CD)	Project Number:
	15499
- Mr Christopher Maritz Karoo Street PRIESKA 8940	Post Office Stamp: 0 N A 0 3 JUN 2019 Tracking Number:
Trace and Track Parcel (CD) Registered Letter	Project Number: 15499
Fast Mail ssed To:	Post Office Stamp:
Mr George Danste Manstraat 13 PRIESKA 8940	0 3 JUN 2019 Tracking Number: 4 2128
Trace and Track Parcel (CD)	Project Number:
	15499
Ms Susanna Human P O BOX 130 PRIESKA 8940	Post Office Stamp: 03 JUN 2019 2123 Tracking Number:
	Registered Letter Fast Mail sed To: Mr Christopher Maritz Karoo Street PRIESKA 8940 Trace and Track Parcel (CD) Registered Letter Fast Mail sed To: Mr George Danste Manstraat 13 PRIESKA 8940 Trace and Track Parcel (CD) Registered Letter Fast Mail ssed To: Ms Susanna Human P O BOX 130 PRIESKA

	EA AMER	NOMENT MOTIVATION REPORT 1AP
X	Trace and Track Parcel (CD) Registered Letter Fast Mail	Project Number: 15499
ddres	Mr P Visagie Burger Street 43 PRIESKA	Post Office Stamp: 0 3 JUN 2019 Tracking Number: 1 28
X	Trace and Track Parcel (CD) Registered Letter Fast Mail	Project Number: 15499
	Mr Weedis Papier E22 Niekershoop PRIESKA 8930	Post Office Stamp: 1 4 0 3 JUN 2019 21 28 Tracking Number:
	Trace and Track Parcel (CD) Registered Letter Fast Mail	Project Number: 154-99
dress	Mr Richard Molepo E38 Segeecho Str PRIESKA 8940	Post Office Stamp: 0 3 JUN 2019 Tracking Number 23

	EAMOND	MENT MOTIVATION REPORT 1 AP
x	Trace and Track Parcel (CD) Registered Letter	Project Number: 15499
	Mr Ricardo Vlem 58 Wilger Straat Bonteheuwel PRIESKA 8940	Post Office Stamp: 0 3 JUN 2019 Tracking Number:
x	Trace and Track Parcel (CD) Registered Letter Fast Mail	Project Number: 15499
Addre	Mr Paul Palm 7de Laan 4137 N Wooving PRIESKA 8940	Post Office Stamp: 0 3 JUN 2019 Tracking Number 1 23
×	Trace and Track Parcel (CD) Registered Letter Fast Mail	Project Number: 15499
	Mr Moses Mfihlo A5 Booysen Ethembeni PRIESKA 8940	Post Office Stamp: 0 3 JUN 2019 Tracking Number:

EA AMENDMENT MOTIVATION REPORT - 1 AP
Project Number: Trace and Track Parcel (CD) **Registered Letter** Fast Mail X Post Office Stamp: Addressed To: Mr Noklaas Adams 3652 Mandela Plein **PRIESKA** 8940 Tracking Number Project Number: Trace and Track Parcel (CD) **Registered Letter** 15499 Fast Mail Post Office Stamp: Addressed To: 0 3 JUN 2019 Mr Sean Maritz 20 Karoo Str Tracking Number: **PRIESKA** 8940 Project Number: Trace and Track Parcel (CD) **Registered Letter** 15499 Fast Mail Post Office Stamp: Addressed To: Mr Danni Boy Malgas 47 Wilger Street PRIESKA 8940 Tracking Number:

	EA ANAGO	DIMENT MOTIVATION REPORT PAP
¥	Trace and Track Parcel (CD) Registered Letter Fast Mail	Project Number: 154-99
	ssed To:	Doct Office Co.
	Mr Klaas Pieterse 17 Blesbok Str PRIESKA 8940	Post Office Stamp: 0 3 JUN 2019 Tracking Number: 1 2 8
X	Trace and Track Parcel (CD) Registered Letter Fast Mail	Project Number: 15499
1.00	sed To:	Post Office Stamp:
	Mr Booi Raats 23 Tobias Str PRIESKA — 8940	- 03 JUN 2019 - Tracking Number:
X	Trace and Track Parcel (CD) Registered Letter Fast Mail	Project Number: 15499
ddress	ed To:	Post Office Stamp:
	Mr Elliot Khethelo 19 Jakavulo Street PRIESKA 8940	0 3 JUN 2019 Tracking Number: 1 2 8

Trace and Track Parcel (CD) Registered Letter Fast Mail Addressed To: Mr Shadrack Adams Papagaai Straat 1232 PRIESKA 8940 Tracking Number: Tracking Number: Tracking Number: Tracking Number:

Trace and Track Parcel (CD) Registered Letter X Fast Mail	Project Number: 15499
Addressed To: Mr Hester Olyn Springbok Street 28 PRIESKA 8940	Post Office Stamp: 0 3 JUN 2019 Tracking Number: 4 2128

X	Trace and Track Parcel (CD) Registered Letter Fast Mail	Project Number: 15499
Addres	Mr Booysen Wilger Street 45 PRIESKA	Post Office Stamp: 0 3 JUN 2019 2123 Tracking Number:

Phonenumber	Network	Status	Scheduled Date	Submitted Date	Status Date	Sent Data	Group Name	Group Description
27717439480	MTN	EXPIRED	6/3/2019 4:49:00 PM	6/3/2019 4:49:21 PM	6/3/2019 9:07:34 PM	DraftEnvironmentalAuthorisationAmendmentReport submitted toDepartment ofEnvironmentalAffairs for Aletta Wind Farms near Copperton on 03/06/19. Info 0117980600	Aletta WEF	EA Amendment Motivation Report
27791602355	Vodacom	DELIVRD	6/3/2019 4:49:00 PM	6/3/2019 4:49:21 PM	6/3/2019 4:49:35 PM	DraftEnvironmentalAuthorisationAmendmentReport submitted toDepartment ofEnvironmentalAffairs for Aletta Wind Farms near Copperton on 03/06/19. Info 0117980600	Aletta WEF	EA Amendment Motivation Report
27603724940	MTN	DELIVRD	6/3/2019 4:49:00 PM	6/3/2019 4:49:20 PM	6/3/2019 4:49:29 PM	DraftEnvironmentalAuthorisationAmendmentReport submitted toDepartment ofEnvironmentalAffairs for Aletta Wind Farms near Copperton on 03/06/19. Info 0117980600	Aletta WEF	EA Amendment Motivation Report
27717528568	MTN	EXPIRED	6/3/2019 4:49:00 PM	6/3/2019 4:49:20 PM	6/3/2019 9:07:34 PM	DraftEnvironmentalAuthorisationAmendmentReport submitted toDepartment ofEnvironmentalAffairs for Aletta Wind Farms near Copperton on 03/06/19. Info 0117980600	Aletta WEF	EA Amendment Motivation Report
27748391704	CELL C	UNDELIV	6/3/2019 4:49:00 PM	6/3/2019 4:49:20 PM	6/3/2019 5:19:30 PM	DraftEnvironmentalAuthorisationAmendmentReport submitted toDepartment ofEnvironmentalAffairs for Aletta Wind Farms near Copperton on 03/06/19. Info 0117980600	Aletta WEF	EA Amendment Motivation Report
27792218471	CELL C	UNDELIV	6/3/2019 4:49:00 PM	6/3/2019 4:49:20 PM	6/3/2019 5:19:30 PM	DraftEnvironmentalAuthorisationAmendmentReport submitted toDepartment ofEnvironmentalAffairs for Aletta Wind Farms near Copperton on 03/06/19. Info 0117980600	Aletta WEF	EA Amendment Motivation Report
27603949074	MTN	EXPIRED	6/3/2019 4:49:00 PM	6/3/2019 4:49:21 PM	6/3/2019 9:07:34 PM	DraftEnvironmentalAuthorisationAmendmentReport submitted toDepartment ofEnvironmentalAffairs for Aletta Wind Farms near Copperton on 03/06/19. Info 0117980600	Aletta WEF	EA Amendment Motivation Report
27717957630	MTN	DELIVRD	6/3/2019 4:49:00 PM	6/3/2019 4:49:21 PM	6/3/2019 4:49:26 PM	DraftEnvironmentalAuthorisationAmendmentReport submitted toDepartment ofEnvironmentalAffairs for Aletta Wind Farms near Copperton on 03/06/19. Info 0117980600	Aletta WEF	EA Amendment Motivation Report
27749095063	CELL C	DELIVRD	6/3/2019 4:49:00 PM	6/3/2019 4:49:20 PM	6/3/2019 4:49:25 PM	DraftEnvironmentalAuthorisationAmendmentReport submitted toDepartment ofEnvironmentalAffairs for Aletta Wind Farms near Copperton on 03/06/19. Info 0117980600	Aletta WEF	EA Amendment Motivation Report
27793505404	Vodacom	EXPIRED	6/3/2019 4:49:00 PM	6/3/2019 4:49:21 PM	6/3/2019 9:07:34 PM	DraftEnvironmentalAuthorisationAmendmentReport submitted toDepartment ofEnvironmentalAffairs for Aletta Wind Farms near Copperton on 03/06/19. Info 0117980600	Aletta WEF	EA Amendment Motivation Report
27604384216	CELL C	DELIVRD	6/3/2019 4:49:00 PM	6/3/2019 4:49:20 PM	6/3/2019 4:49:22 PM	DraftEnvironmentalAuthorisationAmendmentReport submitted toDepartment ofEnvironmentalAffairs for Aletta Wind Farms near Copperton on 03/06/19. Info 0117980600	Aletta WEF	EA Amendment Motivation Report

27718311455	MTN	DELIVRD	6/3/2019 4:49:00 PM	6/3/2019 4:49:21 PM	6/3/2019 6:05:16 PM	DraftEnvironmentalAuthorisationAmendmentReport submitted toDepartment ofEnvironmentalAffairs for Aletta Wind Farms near Copperton on 03/06/19. Info 0117980600	Aletta WEF	EA Amendment Motivation Report
27749301112	CELL C	EXPIRED	6/3/2019 4:49:00 PM	6/3/2019 4:49:20 PM	6/3/2019 9:07:34 PM	DraftEnvironmentalAuthorisationAmendmentReport submitted toDepartment ofEnvironmentalAffairs for Aletta Wind Farms near Copperton on 03/06/19. Info 0117980600	Aletta WEF	EA Amendment Motivation Report
27794005847	CELL C	EXPIRED	6/3/2019 4:49:00 PM	6/3/2019 4:49:20 PM	6/3/2019 9:07:34 PM	DraftEnvironmentalAuthorisationAmendmentReport submitted toDepartment ofEnvironmentalAffairs for Aletta Wind Farms near Copperton on 03/06/19. Info 0117980600	Aletta WEF	EA Amendment Motivation Report
27606868806	Vodacom	DELIVRD	6/3/2019 4:49:00 PM	6/3/2019 4:49:21 PM	6/3/2019 4:49:27 PM	DraftEnvironmentalAuthorisationAmendmentReport submitted toDepartment ofEnvironmentalAffairs for Aletta Wind Farms near Copperton on 03/06/19. Info 0117980600	Aletta WEF	EA Amendment Motivation Report
27718358405	MTN	EXPIRED	6/3/2019 4:49:00 PM	6/3/2019 4:49:21 PM	6/3/2019 9:07:34 PM	DraftEnvironmentalAuthorisationAmendmentReport submitted toDepartment ofEnvironmentalAffairs for Aletta Wind Farms near Copperton on 03/06/19. Info 0117980600	Aletta WEF	EA Amendment Motivation Report
27794015261	Vodacom	UNDELIV	6/3/2019 4:49:00 PM	6/3/2019 4:49:21 PM	6/3/2019 5:19:31 PM	DraftEnvironmentalAuthorisationAmendmentReport submitted toDepartment ofEnvironmentalAffairs for Aletta Wind Farms near Copperton on 03/06/19. Info 0117980600	Aletta WEF	EA Amendment Motivation Report
27609042642	Vodacom	DELIVRD	6/3/2019 4:49:00 PM	6/3/2019 4:49:21 PM	6/3/2019 4:49:24 PM	DraftEnvironmentalAuthorisationAmendmentReport submitted toDepartment ofEnvironmentalAffairs for Aletta Wind Farms near Copperton on 03/06/19. Info 0117980600	Aletta WEF	EA Amendment Motivation Report
27749387464	CELL C	EXPIRED	6/3/2019 4:49:00 PM	6/3/2019 4:49:20 PM	6/3/2019 9:07:34 PM	DraftEnvironmentalAuthorisationAmendmentReport submitted toDepartment ofEnvironmentalAffairs for Aletta Wind Farms near Copperton on 03/06/19. Info 0117980600	Aletta WEF	EA Amendment Motivation Report
27719064333	MTN	DELIVRD	6/3/2019 4:49:00 PM	6/3/2019 4:49:20 PM	6/3/2019 8:21:16 PM	DraftEnvironmentalAuthorisationAmendmentReport submitted toDepartment ofEnvironmentalAffairs for Aletta Wind Farms near Copperton on 03/06/19. Info 0117980600	Aletta WEF	EA Amendment Motivation Report
27609202393	Vodacom	DELIVRD	6/3/2019 4:49:00 PM	6/3/2019 4:49:21 PM	6/3/2019 6:26:03 PM	DraftEnvironmentalAuthorisationAmendmentReport submitted toDepartment ofEnvironmentalAffairs for Aletta Wind Farms near Copperton on 03/06/19. Info 0117980600	Aletta WEF	EA Amendment Motivation Report
27794202764	CELL C	DELIVRD	6/3/2019 4:49:00 PM	6/3/2019 4:49:20 PM	6/3/2019 4:49:23 PM	DraftEnvironmentalAuthorisationAmendmentReport submitted toDepartment ofEnvironmentalAffairs for Aletta Wind Farms near Copperton on 03/06/19. Info 0117980600	Aletta WEF	EA Amendment Motivation Report
27719588197	MTN	DELIVRD	6/3/2019 4:49:00 PM	6/3/2019 4:49:20 PM	6/3/2019 4:49:23 PM	DraftEnvironmentalAuthorisationAmendmentReport submitted toDepartment ofEnvironmentalAffairs for Aletta Wind Farms near Copperton on 03/06/19. Info 0117980600	Aletta WEF	EA Amendment Motivation Report
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27749454697	CELL C	UNDELIV	6/3/2019 4:49:00 PM	6/3/2019 4:49:20 PM	6/3/2019 5:19:30 PM	DraftEnvironmentalAuthorisationAmendmentReport submitted toDepartment ofEnvironmentalAffairs for Aletta Wind Farms near Copperton on 03/06/19. Info 0117980600	Aletta WEF	EA Amendment Motivation Report
27794965972	Telkom Mobile	UNDELIV	6/3/2019 4:49:00 PM	6/3/2019 4:49:20 PM	6/3/2019 4:49:22 PM	DraftEnvironmentalAuthorisationAmendmentReport submitted toDepartment ofEnvironmentalAffairs for Aletta Wind Farms near Copperton on 03/06/19. Info 0117980600	Aletta WEF	EA Amendment Motivation Report
27610046934	CELL C	DELIVRD	6/3/2019 4:49:00 PM	6/3/2019 4:49:20 PM	6/3/2019 4:49:26 PM	DraftEnvironmentalAuthorisationAmendmentReport submitted toDepartment ofEnvironmentalAffairs for Aletta Wind Farms near Copperton on 03/06/19. Info 0117980600	Aletta WEF	EA Amendment Motivation Report
27760911238	Vodacom	UNDELIV	6/3/2019 4:49:00 PM	6/3/2019 4:49:21 PM	6/3/2019 5:19:35 PM	DraftEnvironmentalAuthorisationAmendmentReport submitted toDepartment ofEnvironmentalAffairs for Aletta Wind Farms near Copperton on 03/06/19. Info 0117980600	Aletta WEF	EA Amendment Motivation Report
27719684952	MTN	DELIVRD	6/3/2019 4:49:00 PM	6/3/2019 4:49:21 PM	6/3/2019 4:49:26 PM	DraftEnvironmentalAuthorisationAmendmentReport submitted toDepartment ofEnvironmentalAffairs for Aletta Wind Farms near Copperton on 03/06/19. Info 0117980600	Aletta WEF	EA Amendment Motivation Report
27796366502	Vodacom	UNDELIV	6/3/2019 4:49:00 PM	6/3/2019 4:49:21 PM	6/3/2019 5:19:35 PM	DraftEnvironmentalAuthorisationAmendmentReport submitted toDepartment ofEnvironmentalAffairs for Aletta Wind Farms near Copperton on 03/06/19. Info 0117980600	Aletta WEF	EA Amendment Motivation Report
27610065636	CELL C	UNDELIV	6/3/2019 4:49:00 PM	6/3/2019 4:49:20 PM	6/3/2019 5:19:30 PM	DraftEnvironmentalAuthorisationAmendmentReport submitted toDepartment ofEnvironmentalAffairs for Aletta Wind Farms near Copperton on 03/06/19. Info 0117980600	Aletta WEF	EA Amendment Motivation Report
27760965959	CELL C	DELIVRD	6/3/2019 4:49:00 PM	6/3/2019 4:49:20 PM	6/3/2019 4:49:23 PM	DraftEnvironmentalAuthorisationAmendmentReport submitted toDepartment ofEnvironmentalAffairs for Aletta Wind Farms near Copperton on 03/06/19. Info 0117980600	Aletta WEF	EA Amendment Motivation Report
27719709278	CELL C	DELIVRD	6/3/2019 4:49:00 PM	6/3/2019 4:49:20 PM	6/3/2019 4:49:25 PM	DraftEnvironmentalAuthorisationAmendmentReport submitted toDepartment ofEnvironmentalAffairs for Aletta Wind Farms near Copperton on 03/06/19. Info 0117980600	Aletta WEF	EA Amendment Motivation Report
27799057743	CELL C	EXPIRED	6/3/2019 4:49:00 PM	6/3/2019 4:49:20 PM	6/3/2019 9:07:34 PM	DraftEnvironmentalAuthorisationAmendmentReport submitted toDepartment ofEnvironmentalAffairs for Aletta Wind Farms near Copperton on 03/06/19. Info 0117980600	Aletta WEF	EA Amendment Motivation Report
27610297639	CELL C	EXPIRED	6/3/2019 4:49:00 PM	6/3/2019 4:49:20 PM	6/3/2019 9:07:34 PM	DraftEnvironmentalAuthorisationAmendmentReport submitted toDepartment ofEnvironmentalAffairs for Aletta Wind Farms near Copperton on 03/06/19. Info 0117980600	Aletta WEF	EA Amendment Motivation Report
27762766484	Vodacom	EXPIRED	6/3/2019 4:49:00 PM	6/3/2019 4:49:21 PM	6/3/2019 9:07:34 PM	DraftEnvironmentalAuthorisationAmendmentReport submitted toDepartment ofEnvironmentalAffairs for Aletta Wind Farms near Copperton on 03/06/19. Info 0117980600	Aletta WEF	EA Amendment Motivation Report

27721263236	CELL C	EXPIRED	6/3/2019 4:49:00 PM	6/3/2019 4:49:20 PM	6/3/2019 9:07:34 PM	DraftEnvironmentalAuthorisationAmendmentReport submitted toDepartment ofEnvironmentalAffairs for Aletta Wind Farms near Copperton on 03/06/19. Info 0117980600	Aletta WEF	EA Amendment Motivation Report
27799785149	CELL C	EXPIRED	6/3/2019 4:49:00 PM	6/3/2019 4:49:20 PM	6/3/2019 9:07:34 PM	DraftEnvironmentalAuthorisationAmendmentReport submitted toDepartment ofEnvironmentalAffairs for Aletta Wind Farms near Copperton on 03/06/19. Info 0117980600	Aletta WEF	EA Amendment Motivation Report
27612162957	CELL C	DELIVRD	6/3/2019 4:49:00 PM	6/3/2019 4:49:20 PM	6/3/2019 4:49:26 PM	DraftEnvironmentalAuthorisationAmendmentReport submitted toDepartment ofEnvironmentalAffairs for Aletta Wind Farms near Copperton on 03/06/19. Info 0117980600	Aletta WEF	EA Amendment Motivation Report
27762956229	CELL C	DELIVRD	6/3/2019 4:49:00 PM	6/3/2019 4:49:20 PM	6/3/2019 4:49:23 PM	DraftEnvironmentalAuthorisationAmendmentReport submitted toDepartment ofEnvironmentalAffairs for Aletta Wind Farms near Copperton on 03/06/19. Info 0117980600	Aletta WEF	EA Amendment Motivation Report
27723287134	CELL C	UNDELIV	6/3/2019 4:49:00 PM	6/3/2019 4:49:20 PM	6/3/2019 5:19:30 PM	DraftEnvironmentalAuthorisationAmendmentReport submitted toDepartment ofEnvironmentalAffairs for Aletta Wind Farms near Copperton on 03/06/19. Info 0117980600	Aletta WEF	EA Amendment Motivation Report
27810764770	MTN	EXPIRED	6/3/2019 4:49:00 PM	6/3/2019 4:49:21 PM	6/3/2019 9:07:34 PM	DraftEnvironmentalAuthorisationAmendmentReport submitted toDepartment ofEnvironmentalAffairs for Aletta Wind Farms near Copperton on 03/06/19. Info 0117980600	Aletta WEF	EA Amendment Motivation Report
27613143121	CELL C	EXPIRED	6/3/2019 4:49:00 PM	6/3/2019 4:49:20 PM	6/3/2019 9:07:34 PM	DraftEnvironmentalAuthorisationAmendmentReport submitted toDepartment ofEnvironmentalAffairs for Aletta Wind Farms near Copperton on 03/06/19. Info 0117980600	Aletta WEF	EA Amendment Motivation Report
27765303880	Vodacom	EXPIRED	6/3/2019 4:49:00 PM	6/3/2019 4:49:21 PM	6/3/2019 9:07:34 PM	DraftEnvironmentalAuthorisationAmendmentReport submitted toDepartment ofEnvironmentalAffairs for Aletta Wind Farms near Copperton on 03/06/19. Info 0117980600	Aletta WEF	EA Amendment Motivation Report
27723883323	Vodacom	DELIVRD	6/3/2019 4:49:00 PM	6/3/2019 4:49:21 PM	6/3/2019 4:49:25 PM	DraftEnvironmentalAuthorisationAmendmentReport submitted toDepartment ofEnvironmentalAffairs for Aletta Wind Farms near Copperton on 03/06/19. Info 0117980600	Aletta WEF	EA Amendment Motivation Report
27818613233	Vodacom	DELIVRD	6/3/2019 4:49:00 PM	6/3/2019 4:49:21 PM	6/3/2019 4:49:24 PM	DraftEnvironmentalAuthorisationAmendmentReport submitted toDepartment ofEnvironmentalAffairs for Aletta Wind Farms near Copperton on 03/06/19. Info 0117980600	Aletta WEF	EA Amendment Motivation Report
27613352603	CELL C	UNDELIV	6/3/2019 4:49:00 PM	6/3/2019 4:49:21 PM	6/3/2019 5:19:29 PM	DraftEnvironmentalAuthorisationAmendmentReport submitted toDepartment ofEnvironmentalAffairs for Aletta Wind Farms near Copperton on 03/06/19. Info 0117980600	Aletta WEF	EA Amendment Motivation Report
27765414664	MTN	EXPIRED	6/3/2019 4:49:00 PM	6/3/2019 4:49:21 PM	6/3/2019 9:07:34 PM	DraftEnvironmentalAuthorisationAmendmentReport submitted toDepartment ofEnvironmentalAffairs for Aletta Wind Farms near Copperton on 03/06/19. Info 0117980600	Aletta WEF	EA Amendment Motivation Report

27723967561	Vodacom	DELIVRD	6/3/2019 4:49:00 PM	6/3/2019 4:49:21 PM	6/3/2019 4:49:30 PM	DraftEnvironmentalAuthorisationAmendmentReport submitted toDepartment ofEnvironmentalAffairs for Aletta Wind Farms near Copperton on 03/06/19. Info 0117980600	Aletta WEF	EA Amendment Motivation Report
27613361525	CELL C	UNDELIV	6/3/2019 4:49:00 PM	6/3/2019 4:49:21 PM	6/3/2019 5:19:29 PM	DraftEnvironmentalAuthorisationAmendmentReport submitted toDepartment ofEnvironmentalAffairs for Aletta Wind Farms near Copperton on 03/06/19. Info 0117980600	Aletta WEF	EA Amendment Motivation Report
27820527968	CELL C	DELIVRD	6/3/2019 4:49:00 PM	6/3/2019 4:49:21 PM	6/3/2019 4:49:27 PM	DraftEnvironmentalAuthorisationAmendmentReport submitted toDepartment ofEnvironmentalAffairs for Aletta Wind Farms near Copperton on 03/06/19. Info 0117980600	Aletta WEF	EA Amendment Motivation Report
27766999711	Vodacom	DELIVRD	6/3/2019 4:49:00 PM	6/3/2019 4:49:21 PM	6/3/2019 4:49:25 PM	DraftEnvironmentalAuthorisationAmendmentReport submitted toDepartment ofEnvironmentalAffairs for Aletta Wind Farms near Copperton on 03/06/19. Info 0117980600	Aletta WEF	EA Amendment Motivation Report
27724847131	Vodacom	DELIVRD	6/3/2019 4:49:00 PM	6/3/2019 4:49:21 PM	6/3/2019 4:49:29 PM	DraftEnvironmentalAuthorisationAmendmentReport submitted toDepartment ofEnvironmentalAffairs for Aletta Wind Farms near Copperton on 03/06/19. Info 0117980600	Aletta WEF	EA Amendment Motivation Report
27613663277	CELL C	DELIVRD	6/3/2019 4:49:00 PM	6/3/2019 4:49:21 PM	6/3/2019 4:49:27 PM	DraftEnvironmentalAuthorisationAmendmentReport submitted toDepartment ofEnvironmentalAffairs for Aletta Wind Farms near Copperton on 03/06/19. Info 0117980600	Aletta WEF	EA Amendment Motivation Report
27822111011	Vodacom	DELIVRD	6/3/2019 4:49:00 PM	6/3/2019 4:49:21 PM	6/3/2019 4:49:25 PM	DraftEnvironmentalAuthorisationAmendmentReport submitted toDepartment ofEnvironmentalAffairs for Aletta Wind Farms near Copperton on 03/06/19. Info 0117980600	Aletta WEF	EA Amendment Motivation Report
27725704762	Vodacom	DELIVRD	6/3/2019 4:49:00 PM	6/3/2019 4:49:21 PM	6/3/2019 4:49:24 PM	DraftEnvironmentalAuthorisationAmendmentReport submitted toDepartment ofEnvironmentalAffairs for Aletta Wind Farms near Copperton on 03/06/19. Info 0117980600	Aletta WEF	EA Amendment Motivation Report
27616237843	CELL C	UNDELIV	6/3/2019 4:49:00 PM	6/3/2019 4:49:20 PM	6/3/2019 5:19:30 PM	DraftEnvironmentalAuthorisationAmendmentReport submitted toDepartment ofEnvironmentalAffairs for Aletta Wind Farms near Copperton on 03/06/19. Info 0117980600	Aletta WEF	EA Amendment Motivation Report
27767724178	Vodacom	UNDELIV	6/3/2019 4:49:00 PM	6/3/2019 4:49:21 PM	6/3/2019 5:19:35 PM	DraftEnvironmentalAuthorisationAmendmentReport submitted toDepartment ofEnvironmentalAffairs for Aletta Wind Farms near Copperton on 03/06/19. Info 0117980600	Aletta WEF	EA Amendment Motivation Report
27824012767	Vodacom	EXPIRED	6/3/2019 4:49:00 PM	6/3/2019 4:49:21 PM	6/3/2019 9:07:34 PM	DraftEnvironmentalAuthorisationAmendmentReport submitted toDepartment ofEnvironmentalAffairs for Aletta Wind Farms near Copperton on 03/06/19. Info 0117980600	Aletta WEF	EA Amendment Motivation Report
27726195399	Vodacom	EXPIRED	6/3/2019 4:49:00 PM	6/3/2019 4:49:21 PM	6/3/2019 9:07:34 PM	DraftEnvironmentalAuthorisationAmendmentReport submitted toDepartment ofEnvironmentalAffairs for Aletta Wind Farms near Copperton on 03/06/19. Info 0117980600	Aletta WEF	EA Amendment Motivation Report

27768222172	Vodacom	DELIVRD	6/3/2019 4:49:00 PM	6/3/2019 4:49:21 PM	6/3/2019 4:49:25 PM	DraftEnvironmentalAuthorisationAmendmentReport submitted toDepartment ofEnvironmentalAffairs for Aletta Wind Farms near Copperton on 03/06/19. Info 0117980600	Aletta WEF	EA Amendment Motivation Report
27616383672	CELL C	DELIVRD	6/3/2019 4:49:00 PM	6/3/2019 4:49:21 PM	6/3/2019 4:49:22 PM	DraftEnvironmentalAuthorisationAmendmentReport submitted toDepartment ofEnvironmentalAffairs for Aletta Wind Farms near Copperton on 03/06/19. Info 0117980600	Aletta WEF	EA Amendment Motivation Report
27824759348	MTN	DELIVRD	6/3/2019 4:49:00 PM	6/3/2019 4:49:20 PM	6/3/2019 4:49:25 PM	DraftEnvironmentalAuthorisationAmendmentReport submitted toDepartment ofEnvironmentalAffairs for Aletta Wind Farms near Copperton on 03/06/19. Info 0117980600	Aletta WEF	EA Amendment Motivation Report
27726853872	Vodacom	DELIVRD	6/3/2019 4:49:00 PM	6/3/2019 4:49:21 PM	6/3/2019 4:49:25 PM	DraftEnvironmentalAuthorisationAmendmentReport submitted toDepartment ofEnvironmentalAffairs for Aletta Wind Farms near Copperton on 03/06/19. Info 0117980600	Aletta WEF	EA Amendment Motivation Report
27768645738	Vodacom	DELIVRD	6/3/2019 4:49:00 PM	6/3/2019 4:49:21 PM	6/3/2019 4:49:26 PM	DraftEnvironmentalAuthorisationAmendmentReport submitted toDepartment ofEnvironmentalAffairs for Aletta Wind Farms near Copperton on 03/06/19. Info 0117980600	Aletta WEF	EA Amendment Motivation Report
27617315273	CELL C	UNDELIV	6/3/2019 4:49:00 PM	6/3/2019 4:49:20 PM	6/3/2019 5:19:29 PM	DraftEnvironmentalAuthorisationAmendmentReport submitted toDepartment ofEnvironmentalAffairs for Aletta Wind Farms near Copperton on 03/06/19. Info 0117980600	Aletta WEF	EA Amendment Motivation Report
27727144380	Vodacom	DELIVRD	6/3/2019 4:49:00 PM	6/3/2019 4:49:21 PM	6/3/2019 4:49:23 PM	DraftEnvironmentalAuthorisationAmendmentReport submitted toDepartment ofEnvironmentalAffairs for Aletta Wind Farms near Copperton on 03/06/19. Info 0117980600	Aletta WEF	EA Amendment Motivation Report
27827263779	CELL C	UNDELIV	6/3/2019 4:49:00 PM	6/3/2019 4:49:20 PM	6/3/2019 5:19:30 PM	DraftEnvironmentalAuthorisationAmendmentReport submitted toDepartment ofEnvironmentalAffairs for Aletta Wind Farms near Copperton on 03/06/19. Info 0117980600	Aletta WEF	EA Amendment Motivation Report
27769342586	Vodacom	DELIVRD	6/3/2019 4:49:00 PM	6/3/2019 4:49:21 PM	6/3/2019 4:49:24 PM	DraftEnvironmentalAuthorisationAmendmentReport submitted toDepartment ofEnvironmentalAffairs for Aletta Wind Farms near Copperton on 03/06/19. Info 0117980600	Aletta WEF	EA Amendment Motivation Report
27727507126	Vodacom	EXPIRED	6/3/2019 4:49:00 PM	6/3/2019 4:49:21 PM	6/3/2019 9:07:34 PM	DraftEnvironmentalAuthorisationAmendmentReport submitted toDepartment ofEnvironmentalAffairs for Aletta Wind Farms near Copperton on 03/06/19. Info 0117980600	Aletta WEF	EA Amendment Motivation Report
27828111705	Vodacom	DELIVRD	6/3/2019 4:49:00 PM	6/3/2019 4:49:21 PM	6/3/2019 4:49:22 PM	DraftEnvironmentalAuthorisationAmendmentReport submitted toDepartment ofEnvironmentalAffairs for Aletta Wind Farms near Copperton on 03/06/19. Info 0117980600	Aletta WEF	EA Amendment Motivation Report
27617708133	CELL C	UNDELIV	6/3/2019 4:49:00 PM	6/3/2019 4:49:21 PM	6/3/2019 5:19:30 PM	DraftEnvironmentalAuthorisationAmendmentReport submitted toDepartment ofEnvironmentalAffairs for Aletta Wind Farms near Copperton on 03/06/19. Info 0117980600	Aletta WEF	EA Amendment Motivation Report

27769393565	Vodacom	DELIVRD	6/3/2019 4:49:00 PM	6/3/2019 4:49:21 PM	6/3/2019 4:49:27 PM	DraftEnvironmentalAuthorisationAmendmentReport submitted toDepartment ofEnvironmentalAffairs for Aletta Wind Farms near Copperton on 03/06/19. Info 0117980600	Aletta WEF	EA Amendment Motivation Report
27729024439	Vodacom	EXPIRED	6/3/2019 4:49:00 PM	6/3/2019 4:49:21 PM	6/3/2019 9:07:34 PM	DraftEnvironmentalAuthorisationAmendmentReport submitted toDepartment ofEnvironmentalAffairs for Aletta Wind Farms near Copperton on 03/06/19. Info 0117980600	Aletta WEF	EA Amendment Motivation Report
27828276054	Vodacom	DELIVRD	6/3/2019 4:49:00 PM	6/3/2019 4:49:21 PM	6/3/2019 4:49:23 PM	DraftEnvironmentalAuthorisationAmendmentReport submitted toDepartment ofEnvironmentalAffairs for Aletta Wind Farms near Copperton on 03/06/19. Info 0117980600	Aletta WEF	EA Amendment Motivation Report
27618023706	CELL C	EXPIRED	6/3/2019 4:49:00 PM	6/3/2019 4:49:21 PM	6/3/2019 9:07:34 PM	DraftEnvironmentalAuthorisationAmendmentReport submitted toDepartment ofEnvironmentalAffairs for Aletta Wind Farms near Copperton on 03/06/19. Info 0117980600	Aletta WEF	EA Amendment Motivation Report
27780171707	MTN	EXPIRED	6/3/2019 4:49:00 PM	6/3/2019 4:49:21 PM	6/3/2019 9:07:34 PM	DraftEnvironmentalAuthorisationAmendmentReport submitted toDepartment ofEnvironmentalAffairs for Aletta Wind Farms near Copperton on 03/06/19. Info 0117980600	Aletta WEF	EA Amendment Motivation Report
27730215253	MTN	EXPIRED	6/3/2019 4:49:00 PM	6/3/2019 4:49:21 PM	6/3/2019 9:07:34 PM	DraftEnvironmentalAuthorisationAmendmentReport submitted toDepartment ofEnvironmentalAffairs for Aletta Wind Farms near Copperton on 03/06/19. Info 0117980600	Aletta WEF	EA Amendment Motivation Report
27832338644	MTN	DELIVRD	6/3/2019 4:49:00 PM	6/3/2019 4:49:20 PM	6/3/2019 4:49:27 PM	DraftEnvironmentalAuthorisationAmendmentReport submitted toDepartment ofEnvironmentalAffairs for Aletta Wind Farms near Copperton on 03/06/19. Info 0117980600	Aletta WEF	EA Amendment Motivation Report
27780298615	MTN	DELIVRD	6/3/2019 4:49:00 PM	6/3/2019 4:49:20 PM	6/3/2019 4:49:27 PM	DraftEnvironmentalAuthorisationAmendmentReport submitted toDepartment ofEnvironmentalAffairs for Aletta Wind Farms near Copperton on 03/06/19. Info 0117980600	Aletta WEF	EA Amendment Motivation Report
27832483587	MTN	DELIVRD	6/3/2019 4:49:00 PM	6/3/2019 4:49:20 PM	6/3/2019 4:49:25 PM	DraftEnvironmentalAuthorisationAmendmentReport submitted toDepartment ofEnvironmentalAffairs for Aletta Wind Farms near Copperton on 03/06/19. Info 0117980600	Aletta WEF	EA Amendment Motivation Report
27730284410	MTN	DELIVRD	6/3/2019 4:49:00 PM	6/3/2019 4:49:21 PM	6/3/2019 4:49:25 PM	DraftEnvironmentalAuthorisationAmendmentReport submitted toDepartment ofEnvironmentalAffairs for Aletta Wind Farms near Copperton on 03/06/19. Info 0117980600	Aletta WEF	EA Amendment Motivation Report
27619068411	CELL C	UNDELIV	6/3/2019 4:49:00 PM	6/3/2019 4:49:21 PM	6/3/2019 5:19:30 PM	DraftEnvironmentalAuthorisationAmendmentReport submitted toDepartment ofEnvironmentalAffairs for Aletta Wind Farms near Copperton on 03/06/19. Info 0117980600	Aletta WEF	EA Amendment Motivation Report
27780395061	CELL C	DELIVRD	6/3/2019 4:49:00 PM	6/3/2019 4:49:21 PM	6/3/2019 4:49:23 PM	DraftEnvironmentalAuthorisationAmendmentReport submitted toDepartment ofEnvironmentalAffairs for Aletta Wind Farms near Copperton on 03/06/19. Info 0117980600	Aletta WEF	EA Amendment Motivation Report

27833386758	MTN	EXPIRED	6/3/2019 4:49:00 PM	6/3/2019 4:49:21 PM	6/3/2019 9:07:34 PM	DraftEnvironmentalAuthorisationAmendmentReport submitted toDepartment ofEnvironmentalAffairs for Aletta Wind Farms near Copperton on 03/06/19. Info 0117980600	Aletta WEF	EA Amendment Motivation Report
27730607030	MTN	UNDELIV	6/3/2019 4:49:00 PM	6/3/2019 4:49:21 PM	6/3/2019 5:19:28 PM	DraftEnvironmentalAuthorisationAmendmentReport submitted toDepartment ofEnvironmentalAffairs for Aletta Wind Farms near Copperton on 03/06/19. Info 0117980600	Aletta WEF	EA Amendment Motivation Report
27619083096	CELL C	EXPIRED	6/3/2019 4:49:00 PM	6/3/2019 4:49:21 PM	6/3/2019 9:07:34 PM	DraftEnvironmentalAuthorisationAmendmentReport submitted toDepartment ofEnvironmentalAffairs for Aletta Wind Farms near Copperton on 03/06/19. Info 0117980600	Aletta WEF	EA Amendment Motivation Report
27834022548	MTN	DELIVRD	6/3/2019 4:49:00 PM	6/3/2019 4:49:21 PM	6/3/2019 4:49:23 PM	DraftEnvironmentalAuthorisationAmendmentReport submitted toDepartment ofEnvironmentalAffairs for Aletta Wind Farms near Copperton on 03/06/19. Info 0117980600	Aletta WEF	EA Amendment Motivation Report
27780621358	MTN	EXPIRED	6/3/2019 4:49:00 PM	6/3/2019 4:49:21 PM	6/3/2019 9:07:34 PM	DraftEnvironmentalAuthorisationAmendmentReport submitted toDepartment ofEnvironmentalAffairs for Aletta Wind Farms near Copperton on 03/06/19. Info 0117980600	Aletta WEF	EA Amendment Motivation Report
27730845835	MTN	EXPIRED	6/3/2019 4:49:00 PM	6/3/2019 4:49:21 PM	6/3/2019 9:07:34 PM	DraftEnvironmentalAuthorisationAmendmentReport submitted toDepartment ofEnvironmentalAffairs for Aletta Wind Farms near Copperton on 03/06/19. Info 0117980600	Aletta WEF	EA Amendment Motivation Report
27619191578	CELL C	DELIVRD	6/3/2019 4:49:00 PM	6/3/2019 4:49:21 PM	6/3/2019 4:49:28 PM	DraftEnvironmentalAuthorisationAmendmentReport submitted toDepartment ofEnvironmentalAffairs for Aletta Wind Farms near Copperton on 03/06/19. Info 0117980600	Aletta WEF	EA Amendment Motivation Report
27835128963	MTN	EXPIRED	6/3/2019 4:49:00 PM	6/3/2019 4:49:21 PM	6/3/2019 9:07:34 PM	DraftEnvironmentalAuthorisationAmendmentReport submitted toDepartment ofEnvironmentalAffairs for Aletta Wind Farms near Copperton on 03/06/19. Info 0117980600	Aletta WEF	EA Amendment Motivation Report
27780662176	CELL C	EXPIRED	6/3/2019 4:49:00 PM	6/3/2019 4:49:21 PM	6/3/2019 9:07:34 PM	DraftEnvironmentalAuthorisationAmendmentReport submitted toDepartment ofEnvironmentalAffairs for Aletta Wind Farms near Copperton on 03/06/19. Info 0117980600	Aletta WEF	EA Amendment Motivation Report
27732012271	CELL C	EXPIRED	6/3/2019 4:49:00 PM	6/3/2019 4:49:21 PM	6/3/2019 9:07:34 PM	DraftEnvironmentalAuthorisationAmendmentReport submitted toDepartment ofEnvironmentalAffairs for Aletta Wind Farms near Copperton on 03/06/19. Info 0117980600	Aletta WEF	EA Amendment Motivation Report
27623695260	CELL C	UNDELIV	6/3/2019 4:49:00 PM	6/3/2019 4:49:21 PM	6/3/2019 5:19:29 PM	DraftEnvironmentalAuthorisationAmendmentReport submitted toDepartment ofEnvironmentalAffairs for Aletta Wind Farms near Copperton on 03/06/19. Info 0117980600	Aletta WEF	EA Amendment Motivation Report
27781181817	CELL C	EXPIRED	6/3/2019 4:49:00 PM	6/3/2019 4:49:21 PM	6/3/2019 9:07:34 PM	DraftEnvironmentalAuthorisationAmendmentReport submitted toDepartment ofEnvironmentalAffairs for Aletta Wind Farms near Copperton on 03/06/19. Info 0117980600	Aletta WEF	EA Amendment Motivation Report

27732150275	Vodacom	DELIVRD	6/3/2019 4:49:00 PM	6/3/2019 4:49:21 PM	6/3/2019 4:49:25 PM	DraftEnvironmentalAuthorisationAmendmentReport submitted toDepartment ofEnvironmentalAffairs for Aletta Wind Farms near Copperton on 03/06/19. Info 0117980600	Aletta WEF	EA Amendment Motivation Report
27835677289	MTN	EXPIRED	6/3/2019 4:49:00 PM	6/3/2019 4:49:21 PM	6/3/2019 9:07:34 PM	DraftEnvironmentalAuthorisationAmendmentReport submitted toDepartment ofEnvironmentalAffairs for Aletta Wind Farms near Copperton on 03/06/19. Info 0117980600	Aletta WEF	EA Amendment Motivation Report
27623752896	CELL C	EXPIRED	6/3/2019 4:49:00 PM	6/3/2019 4:49:21 PM	6/3/2019 9:07:34 PM	DraftEnvironmentalAuthorisationAmendmentReport submitted toDepartment ofEnvironmentalAffairs for Aletta Wind Farms near Copperton on 03/06/19. Info 0117980600	Aletta WEF	EA Amendment Motivation Report
27781188000	MTN	DELIVRD	6/3/2019 4:49:00 PM	6/3/2019 4:49:20 PM	6/3/2019 4:49:25 PM	DraftEnvironmentalAuthorisationAmendmentReport submitted toDepartment ofEnvironmentalAffairs for Aletta Wind Farms near Copperton on 03/06/19. Info 0117980600	Aletta WEF	EA Amendment Motivation Report
27732996774	MTN	EXPIRED	6/3/2019 4:49:00 PM	6/3/2019 4:49:21 PM	6/3/2019 9:07:34 PM	DraftEnvironmentalAuthorisationAmendmentReport submitted toDepartment ofEnvironmentalAffairs for Aletta Wind Farms near Copperton on 03/06/19. Info 0117980600	Aletta WEF	EA Amendment Motivation Report
27835795249	MTN	EXPIRED	6/3/2019 4:49:00 PM	6/3/2019 4:49:20 PM	6/3/2019 9:07:34 PM	DraftEnvironmentalAuthorisationAmendmentReport submitted toDepartment ofEnvironmentalAffairs for Aletta Wind Farms near Copperton on 03/06/19. Info 0117980600	Aletta WEF	EA Amendment Motivation Report
27624527392	CELL C	EXPIRED	6/3/2019 4:49:00 PM	6/3/2019 4:49:21 PM	6/3/2019 9:07:34 PM	DraftEnvironmentalAuthorisationAmendmentReport submitted toDepartment ofEnvironmentalAffairs for Aletta Wind Farms near Copperton on 03/06/19. Info 0117980600	Aletta WEF	EA Amendment Motivation Report
27733083538	MTN	EXPIRED	6/3/2019 4:49:00 PM	6/3/2019 4:49:21 PM	6/3/2019 9:07:34 PM	DraftEnvironmentalAuthorisationAmendmentReport submitted toDepartment ofEnvironmentalAffairs for Aletta Wind Farms near Copperton on 03/06/19. Info 0117980600	Aletta WEF	EA Amendment Motivation Report
27836841245	MTN	DELIVRD	6/3/2019 4:49:00 PM	6/3/2019 4:49:21 PM	6/3/2019 5:00:19 PM	DraftEnvironmentalAuthorisationAmendmentReport submitted toDepartment ofEnvironmentalAffairs for Aletta Wind Farms near Copperton on 03/06/19. Info 0117980600	Aletta WEF	EA Amendment Motivation Report
27781395878	MTN	DELIVRD	6/3/2019 4:49:00 PM	6/3/2019 4:49:20 PM	6/3/2019 4:49:27 PM	DraftEnvironmentalAuthorisationAmendmentReport submitted toDepartment ofEnvironmentalAffairs for Aletta Wind Farms near Copperton on 03/06/19. Info 0117980600	Aletta WEF	EA Amendment Motivation Report
27626315007	CELL C	DELIVRD	6/3/2019 4:49:00 PM	6/3/2019 4:49:21 PM	6/3/2019 4:49:28 PM	DraftEnvironmentalAuthorisationAmendmentReport submitted toDepartment ofEnvironmentalAffairs for Aletta Wind Farms near Copperton on 03/06/19. Info 0117980600	Aletta WEF	EA Amendment Motivation Report
27733312277	CELL C	UNDELIV	6/3/2019 4:49:00 PM	6/3/2019 4:49:21 PM	6/3/2019 5:19:30 PM	DraftEnvironmentalAuthorisationAmendmentReport submitted toDepartment ofEnvironmentalAffairs for Aletta Wind Farms near Copperton on 03/06/19. Info 0117980600	Aletta WEF	EA Amendment Motivation Report

27837450378	MTN	DELIVRD	6/3/2019 4:49:00 PM	6/3/2019 4:49:21 PM	6/3/2019 4:49:27 PM	DraftEnvironmentalAuthorisationAmendmentReport submitted toDepartment ofEnvironmentalAffairs for Aletta Wind Farms near Copperton on 03/06/19. Info 0117980600	Aletta WEF	EA Amendment Motivation Report
27626633516	CELL C	EXPIRED	6/3/2019 4:49:00 PM	6/3/2019 4:49:21 PM	6/3/2019 9:07:34 PM	DraftEnvironmentalAuthorisationAmendmentReport submitted toDepartment ofEnvironmentalAffairs for Aletta Wind Farms near Copperton on 03/06/19. Info 0117980600	Aletta WEF	EA Amendment Motivation Report
27782747200	MTN	EXPIRED	6/3/2019 4:49:00 PM	6/3/2019 4:49:21 PM	6/3/2019 9:07:34 PM	DraftEnvironmentalAuthorisationAmendmentReport submitted toDepartment ofEnvironmentalAffairs for Aletta Wind Farms near Copperton on 03/06/19. Info 0117980600	Aletta WEF	EA Amendment Motivation Report
27733675790	MTN	DELIVRD	6/3/2019 4:49:00 PM	6/3/2019 4:49:21 PM	6/3/2019 4:49:26 PM	DraftEnvironmentalAuthorisationAmendmentReport submitted toDepartment ofEnvironmentalAffairs for Aletta Wind Farms near Copperton on 03/06/19. Info 0117980600	Aletta WEF	EA Amendment Motivation Report
27838782247	MTN	EXPIRED	6/3/2019 4:49:00 PM	6/3/2019 4:49:21 PM	6/3/2019 9:07:34 PM	DraftEnvironmentalAuthorisationAmendmentReport submitted toDepartment ofEnvironmentalAffairs for Aletta Wind Farms near Copperton on 03/06/19. Info 0117980600	Aletta WEF	EA Amendment Motivation Report
27628551704	CELL C	DELIVRD	6/3/2019 4:49:00 PM	6/3/2019 4:49:21 PM	6/3/2019 4:49:24 PM	DraftEnvironmentalAuthorisationAmendmentReport submitted toDepartment ofEnvironmentalAffairs for Aletta Wind Farms near Copperton on 03/06/19. Info 0117980600	Aletta WEF	EA Amendment Motivation Report
27735854155	MTN	DELIVRD	6/3/2019 4:49:00 PM	6/3/2019 4:49:20 PM	6/3/2019 4:49:25 PM	DraftEnvironmentalAuthorisationAmendmentReport submitted toDepartment ofEnvironmentalAffairs for Aletta Wind Farms near Copperton on 03/06/19. Info 0117980600	Aletta WEF	EA Amendment Motivation Report
27783055701	MTN	DELIVRD	6/3/2019 4:49:00 PM	6/3/2019 4:49:20 PM	6/3/2019 5:26:56 PM	DraftEnvironmentalAuthorisationAmendmentReport submitted toDepartment ofEnvironmentalAffairs for Aletta Wind Farms near Copperton on 03/06/19. Info 0117980600	Aletta WEF	EA Amendment Motivation Report
27838830352	MTN	DELIVRD	6/3/2019 4:49:00 PM	6/3/2019 4:49:20 PM	6/3/2019 4:49:25 PM	DraftEnvironmentalAuthorisationAmendmentReport submitted toDepartment ofEnvironmentalAffairs for Aletta Wind Farms near Copperton on 03/06/19. Info 0117980600	Aletta WEF	EA Amendment Motivation Report
27630217262	MTN	UNDELIV	6/3/2019 4:49:00 PM	6/3/2019 4:49:21 PM	6/3/2019 5:19:28 PM	DraftEnvironmentalAuthorisationAmendmentReport submitted toDepartment ofEnvironmentalAffairs for Aletta Wind Farms near Copperton on 03/06/19. Info 0117980600	Aletta WEF	EA Amendment Motivation Report
27783098833	CELL C	UNDELIV	6/3/2019 4:49:00 PM	6/3/2019 4:49:21 PM	6/3/2019 5:19:29 PM	DraftEnvironmentalAuthorisationAmendmentReport submitted toDepartment ofEnvironmentalAffairs for Aletta Wind Farms near Copperton on 03/06/19. Info 0117980600	Aletta WEF	EA Amendment Motivation Report

27736169821	MTN	DELIVRD	6/3/2019 4:49:00 PM	6/3/2019 4:49:20 PM	6/3/2019 4:49:27 PM	DraftEnvironmentalAuthorisationAmendmentReport submitted toDepartment ofEnvironmentalAffairs for Aletta Wind Farms near Copperton on 03/06/19. Info 0117980600	Aletta WEF	EA Amendment Motivation Report
27838838119	MTN	DELIVRD	6/3/2019 4:49:00 PM	6/3/2019 4:49:20 PM	6/3/2019 4:49:40 PM	DraftEnvironmentalAuthorisationAmendmentReport submitted toDepartment ofEnvironmentalAffairs for Aletta Wind Farms near Copperton on 03/06/19. Info 0117980600	Aletta WEF	EA Amendment Motivation Report
27630642469	MTN	DELIVRD	6/3/2019 4:49:00 PM	6/3/2019 4:49:20 PM	6/3/2019 4:49:27 PM	DraftEnvironmentalAuthorisationAmendmentReport submitted toDepartment ofEnvironmentalAffairs for Aletta Wind Farms near Copperton on 03/06/19. Info 0117980600	Aletta WEF	EA Amendment Motivation Report
27783435901	MTN	EXPIRED	6/3/2019 4:49:00 PM	6/3/2019 4:49:21 PM	6/3/2019 9:07:34 PM	DraftEnvironmentalAuthorisationAmendmentReport submitted toDepartment ofEnvironmentalAffairs for Aletta Wind Farms near Copperton on 03/06/19. Info 0117980600	Aletta WEF	EA Amendment Motivation Report
27839262566	MTN	DELIVRD	6/3/2019 4:49:00 PM	6/3/2019 4:49:20 PM	6/3/2019 4:49:23 PM	DraftEnvironmentalAuthorisationAmendmentReport submitted toDepartment ofEnvironmentalAffairs for Aletta Wind Farms near Copperton on 03/06/19. Info 0117980600	Aletta WEF	EA Amendment Motivation Report
27736611277	Telkom Mobile	EXPIRED	6/3/2019 4:49:00 PM	6/3/2019 4:49:20 PM	6/3/2019 8:49:33 PM	DraftEnvironmentalAuthorisationAmendmentReport submitted toDepartment ofEnvironmentalAffairs for Aletta Wind Farms near Copperton on 03/06/19. Info 0117980600	Aletta WEF	EA Amendment Motivation Report
27784673567	MTN	DELIVRD	6/3/2019 4:49:00 PM	6/3/2019 4:49:20 PM	6/3/2019 4:49:36 PM	DraftEnvironmentalAuthorisationAmendmentReport submitted toDepartment ofEnvironmentalAffairs for Aletta Wind Farms near Copperton on 03/06/19. Info 0117980600	Aletta WEF	EA Amendment Motivation Report
27630992373	CELL C	UNDELIV	6/3/2019 4:49:00 PM	6/3/2019 4:49:21 PM	6/3/2019 5:19:29 PM	DraftEnvironmentalAuthorisationAmendmentReport submitted toDepartment ofEnvironmentalAffairs for Aletta Wind Farms near Copperton on 03/06/19. Info 0117980600	Aletta WEF	EA Amendment Motivation Report
27839874206	MTN	DELIVRD	6/3/2019 4:49:00 PM	6/3/2019 4:49:20 PM	6/3/2019 4:49:23 PM	DraftEnvironmentalAuthorisationAmendmentReport submitted toDepartment ofEnvironmentalAffairs for Aletta Wind Farms near Copperton on 03/06/19. Info 0117980600	Aletta WEF	EA Amendment Motivation Report
27737782246	MTN	UNDELIV	6/3/2019 4:49:00 PM	6/3/2019 4:49:21 PM	6/3/2019 5:19:29 PM	DraftEnvironmentalAuthorisationAmendmentReport submitted toDepartment ofEnvironmentalAffairs for Aletta Wind Farms near Copperton on 03/06/19. Info 0117980600	Aletta WEF	EA Amendment Motivation Report
27839915547	MTN	EXPIRED	6/3/2019 4:49:00 PM	6/3/2019 4:49:21 PM	6/3/2019 9:07:34 PM	DraftEnvironmentalAuthorisationAmendmentReport submitted toDepartment ofEnvironmentalAffairs for Aletta Wind Farms near Copperton on 03/06/19. Info 0117980600	Aletta WEF	EA Amendment Motivation Report
27631255909	MTN	DELIVRD	6/3/2019 4:49:00 PM	6/3/2019 4:49:21 PM	6/3/2019 4:49:23 PM	DraftEnvironmentalAuthorisationAmendmentReport submitted toDepartment ofEnvironmentalAffairs for Aletta Wind Farms near Copperton on 03/06/19. Info 0117980600	Aletta WEF	EA Amendment Motivation Report

27785039441	MTN	DELIVRD	6/3/2019 4:49:00 PM	6/3/2019 4:49:20 PM	6/3/2019 4:49:25 PM	DraftEnvironmentalAuthorisationAmendmentReport submitted toDepartment ofEnvironmentalAffairs for Aletta Wind Farms near Copperton on 03/06/19. Info 0117980600	Aletta WEF	EA Amendment Motivation Report
27738567080	MTN	EXPIRED	6/3/2019 4:49:00 PM	6/3/2019 4:49:21 PM	6/3/2019 9:07:34 PM	DraftEnvironmentalAuthorisationAmendmentReport submitted toDepartment ofEnvironmentalAffairs for Aletta Wind Farms near Copperton on 03/06/19. Info 0117980600	Aletta WEF	EA Amendment Motivation Report
27840517744	CELL C	UNDELIV	6/3/2019 4:49:00 PM	6/3/2019 4:49:21 PM	6/3/2019 5:19:30 PM	DraftEnvironmentalAuthorisationAmendmentReport submitted toDepartment ofEnvironmentalAffairs for Aletta Wind Farms near Copperton on 03/06/19. Info 0117980600	Aletta WEF	EA Amendment Motivation Report
27631657606	MTN	DELIVRD	6/3/2019 4:49:00 PM	6/3/2019 4:49:20 PM	6/3/2019 4:49:25 PM	DraftEnvironmentalAuthorisationAmendmentReport submitted toDepartment ofEnvironmentalAffairs for Aletta Wind Farms near Copperton on 03/06/19. Info 0117980600	Aletta WEF	EA Amendment Motivation Report
27785164888	MTN	UNDELIV	6/3/2019 4:49:00 PM	6/3/2019 4:49:21 PM		DraftEnvironmentalAuthorisationAmendmentReport submitted toDepartment ofEnvironmentalAffairs for Aletta Wind Farms near Copperton on 03/06/19. Info 0117980600	Aletta WEF	EA Amendment Motivation Report
27738645297	MTN	EXPIRED	6/3/2019 4:49:00 PM	6/3/2019 4:49:21 PM	6/3/2019 9:07:34 PM	DraftEnvironmentalAuthorisationAmendmentReport submitted toDepartment ofEnvironmentalAffairs for Aletta Wind Farms near Copperton on 03/06/19. Info 0117980600	Aletta WEF	EA Amendment Motivation Report
27785245013	MTN	DELIVRD	6/3/2019 4:49:00 PM	6/3/2019 4:49:20 PM		DraftEnvironmentalAuthorisationAmendmentReport submitted toDepartment ofEnvironmentalAffairs for Aletta Wind Farms near Copperton on 03/06/19. Info 0117980600	Aletta WEF	EA Amendment Motivation Report
27840832273	CELL C	UNDELIV	6/3/2019 4:49:00 PM	6/3/2019 4:49:21 PM	6/3/2019 5:19:30 PM	DraftEnvironmentalAuthorisationAmendmentReport submitted toDepartment ofEnvironmentalAffairs for Aletta Wind Farms near Copperton on 03/06/19. Info 0117980600	Aletta WEF	EA Amendment Motivation Report
27631659221	MTN	DELIVRD	6/3/2019 4:49:00 PM	6/3/2019 4:49:20 PM	6/3/2019 4:49:29 PM	DraftEnvironmentalAuthorisationAmendmentReport submitted toDepartment ofEnvironmentalAffairs for Aletta Wind Farms near Copperton on 03/06/19. Info 0117980600	Aletta WEF	EA Amendment Motivation Report
27738879817	MTN	DELIVRD	6/3/2019 4:49:00 PM	6/3/2019 4:49:20 PM	6/3/2019 4:49:23 PM	DraftEnvironmentalAuthorisationAmendmentReport submitted toDepartment ofEnvironmentalAffairs for Aletta Wind Farms near Copperton on 03/06/19. Info 0117980600	Aletta WEF	EA Amendment Motivation Report
27842535036	CELL C	EXPIRED	6/3/2019 4:49:00 PM	6/3/2019 4:49:21 PM	6/3/2019 9:07:34 PM	DraftEnvironmentalAuthorisationAmendmentReport submitted toDepartment ofEnvironmentalAffairs for Aletta Wind Farms near Copperton on 03/06/19. Info 0117980600	Aletta WEF	EA Amendment Motivation Report

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27785540066	MTN	DELIVRD	6/3/2019 4:49:00 PM	6/3/2019 4:49:20 PM	6/3/2019 4:49:27 PM	DraftEnvironmentalAuthorisationAmendmentReport submitted toDepartment ofEnvironmentalAffairs for Aletta Wind Farms near Copperton on 03/06/19. Info 0117980600	Aletta WEF	EA Amendment Motivation Report
27738981183	MTN	EXPIRED	6/3/2019 4:49:00 PM	6/3/2019 4:49:21 PM	6/3/2019 9:07:34 PM	DraftEnvironmentalAuthorisationAmendmentReport submitted toDepartment ofEnvironmentalAffairs for Aletta Wind Farms near Copperton on 03/06/19. Info 0117980600	Aletta WEF	EA Amendment Motivation Report
27632840761	MTN	EXPIRED	6/3/2019 4:49:00 PM	6/3/2019 4:49:20 PM	6/3/2019 9:07:34 PM	DraftEnvironmentalAuthorisationAmendmentReport submitted toDepartment ofEnvironmentalAffairs for Aletta Wind Farms near Copperton on 03/06/19. Info 0117980600	Aletta WEF	EA Amendment Motivation Report
27842692790	CELL C	DELIVRD	6/3/2019 4:49:00 PM	6/3/2019 4:49:21 PM	6/3/2019 4:49:27 PM	DraftEnvironmentalAuthorisationAmendmentReport submitted toDepartment ofEnvironmentalAffairs for Aletta Wind Farms near Copperton on 03/06/19. Info 0117980600	Aletta WEF	EA Amendment Motivation Report
27785660226	MTN	UNDELIV	6/3/2019 4:49:00 PM	6/3/2019 4:49:21 PM	6/3/2019 5:19:28 PM	DraftEnvironmentalAuthorisationAmendmentReport submitted toDepartment ofEnvironmentalAffairs for Aletta Wind Farms near Copperton on 03/06/19. Info 0117980600	Aletta WEF	EA Amendment Motivation Report
27632872747	MTN	DELIVRD	6/3/2019 4:49:00 PM	6/3/2019 4:49:20 PM	6/3/2019 4:49:29 PM	DraftEnvironmentalAuthorisationAmendmentReport submitted toDepartment ofEnvironmentalAffairs for Aletta Wind Farms near Copperton on 03/06/19. Info 0117980600	Aletta WEF	EA Amendment Motivation Report
27738981667	MTN	EXPIRED	6/3/2019 4:49:00 PM	6/3/2019 4:49:21 PM	6/3/2019 9:07:34 PM	DraftEnvironmentalAuthorisationAmendmentReport submitted toDepartment ofEnvironmentalAffairs for Aletta Wind Farms near Copperton on 03/06/19. Info 0117980600	Aletta WEF	EA Amendment Motivation Report
27843601806	CELL C	EXPIRED	6/3/2019 4:49:00 PM	6/3/2019 4:49:21 PM	6/3/2019 9:07:34 PM	DraftEnvironmentalAuthorisationAmendmentReport submitted toDepartment ofEnvironmentalAffairs for Aletta Wind Farms near Copperton on 03/06/19. Info 0117980600	Aletta WEF	EA Amendment Motivation Report
27786519760	CELL C	DELIVRD	6/3/2019 4:49:00 PM	6/3/2019 4:49:21 PM	6/3/2019 4:49:27 PM	DraftEnvironmentalAuthorisationAmendmentReport submitted toDepartment ofEnvironmentalAffairs for Aletta Wind Farms near Copperton on 03/06/19. Info 0117980600	Aletta WEF	EA Amendment Motivation Report
27739811848	MTN	DELIVRD	6/3/2019 4:49:00 PM	6/3/2019 4:49:20 PM	6/3/2019 5:19:57 PM	DraftEnvironmentalAuthorisationAmendmentReport submitted toDepartment ofEnvironmentalAffairs for Aletta Wind Farms near Copperton on 03/06/19. Info 0117980600	Aletta WEF	EA Amendment Motivation Report
27633157841	MTN	EXPIRED	6/3/2019 4:49:00 PM	6/3/2019 4:49:21 PM	6/3/2019 9:07:34 PM	DraftEnvironmentalAuthorisationAmendmentReport submitted toDepartment ofEnvironmentalAffairs for Aletta Wind Farms near Copperton on 03/06/19. Info 0117980600	Aletta WEF	EA Amendment Motivation Report
27844632980	CELL C	EXPIRED	6/3/2019 4:49:00 PM	6/3/2019 4:49:21 PM	6/3/2019 9:07:34 PM	DraftEnvironmentalAuthorisationAmendmentReport submitted toDepartment ofEnvironmentalAffairs for Aletta Wind Farms near Copperton on 03/06/19. Info 0117980600	Aletta WEF	EA Amendment Motivation Report

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27844717485	CELL C	EXPIRED	6/3/2019 4:49:00 PM	6/3/2019 4:49:21 PM	6/3/2019 9:07:34 PM	DraftEnvironmentalAuthorisationAmendmentReport submitted toDepartment ofEnvironmentalAffairs for Aletta Wind Farms near Copperton on 03/06/19. Info 0117980600	Aletta WEF	EA Amendment Motivation Report
27739936223	MTN	DELIVRD	6/3/2019 4:49:00 PM	6/3/2019 4:49:20 PM	6/3/2019 4:49:23 PM	DraftEnvironmentalAuthorisationAmendmentReport submitted toDepartment ofEnvironmentalAffairs for Aletta Wind Farms near Copperton on 03/06/19. Info 0117980600	Aletta WEF	EA Amendment Motivation Report
27786770790	MTN	DELIVRD	6/3/2019 4:49:00 PM	6/3/2019 4:49:20 PM	6/3/2019 4:49:27 PM	DraftEnvironmentalAuthorisationAmendmentReport submitted toDepartment ofEnvironmentalAffairs for Aletta Wind Farms near Copperton on 03/06/19. Info 0117980600	Aletta WEF	EA Amendment Motivation Report
27633766031	MTN	DELIVRD	6/3/2019 4:49:00 PM	6/3/2019 4:49:20 PM	6/3/2019 4:49:25 PM	DraftEnvironmentalAuthorisationAmendmentReport submitted toDepartment ofEnvironmentalAffairs for Aletta Wind Farms near Copperton on 03/06/19. Info 0117980600	Aletta WEF	EA Amendment Motivation Report
27845477647	CELL C	UNDELIV	6/3/2019 4:49:00 PM	6/3/2019 4:49:21 PM	6/3/2019 5:19:30 PM	DraftEnvironmentalAuthorisationAmendmentReport submitted toDepartment ofEnvironmentalAffairs for Aletta Wind Farms near Copperton on 03/06/19. Info 0117980600	Aletta WEF	EA Amendment Motivation Report
27740205975	CELL C	UNDELIV	6/3/2019 4:49:00 PM	6/3/2019 4:49:21 PM	6/3/2019 5:19:30 PM	DraftEnvironmentalAuthorisationAmendmentReport submitted toDepartment ofEnvironmentalAffairs for Aletta Wind Farms near Copperton on 03/06/19. Info 0117980600	Aletta WEF	EA Amendment Motivation Report
27634214668	MTN	EXPIRED	6/3/2019 4:49:00 PM	6/3/2019 4:49:21 PM	6/3/2019 9:07:34 PM	DraftEnvironmentalAuthorisationAmendmentReport submitted toDepartment ofEnvironmentalAffairs for Aletta Wind Farms near Copperton on 03/06/19. Info 0117980600	Aletta WEF	EA Amendment Motivation Report
27786770990	MTN	UNDELIV	6/3/2019 4:49:00 PM	6/3/2019 4:49:21 PM	6/3/2019 5:19:28 PM	DraftEnvironmentalAuthorisationAmendmentReport submitted toDepartment ofEnvironmentalAffairs for Aletta Wind Farms near Copperton on 03/06/19. Info 0117980600	Aletta WEF	EA Amendment Motivation Report
27846071836	CELL C	DELIVRD	6/3/2019 4:49:00 PM	6/3/2019 4:49:21 PM	6/3/2019 4:49:22 PM	DraftEnvironmentalAuthorisationAmendmentReport submitted toDepartment ofEnvironmentalAffairs for Aletta Wind Farms near Copperton on 03/06/19. Info 0117980600	Aletta WEF	EA Amendment Motivation Report
27740713587	CELL C	EXPIRED	6/3/2019 4:49:00 PM	6/3/2019 4:49:21 PM	6/3/2019 9:07:34 PM	DraftEnvironmentalAuthorisationAmendmentReport submitted toDepartment ofEnvironmentalAffairs for Aletta Wind Farms near Copperton on 03/06/19. Info 0117980600	Aletta WEF	EA Amendment Motivation Report
27634393387	CELL C	EXPIRED	6/3/2019 4:49:00 PM	6/3/2019 4:49:21 PM	6/3/2019 9:07:34 PM	DraftEnvironmentalAuthorisationAmendmentReport submitted toDepartment ofEnvironmentalAffairs for Aletta Wind Farms near Copperton on 03/06/19. Info 0117980600	Aletta WEF	EA Amendment Motivation Report
27787024176	MTN	UNDELIV	6/3/2019 4:49:00 PM	6/3/2019 4:49:21 PM	6/3/2019 5:19:28 PM	DraftEnvironmentalAuthorisationAmendmentReport submitted toDepartment ofEnvironmentalAffairs for Aletta Wind Farms near Copperton on 03/06/19. Info 0117980600	Aletta WEF	EA Amendment Motivation Report

27847012412	CELL C	DELIVRD	6/3/2019 4:49:00 PM	6/3/2019 4:49:21 PM	6/3/2019 4:49:29 PM	DraftEnvironmentalAuthorisationAmendmentReport submitted toDepartment ofEnvironmentalAffairs for Aletta Wind Farms near Copperton on 03/06/19. Info 0117980600	Aletta WEF	EA Amendment Motivation Report
27742375435	CELL C	DELIVRD	6/3/2019 4:49:00 PM	6/3/2019 4:49:21 PM	6/3/2019 4:49:27 PM	DraftEnvironmentalAuthorisationAmendmentReport submitted toDepartment ofEnvironmentalAffairs for Aletta Wind Farms near Copperton on 03/06/19. Info 0117980600	Aletta WEF	EA Amendment Motivation Report
27634841716	MTN	UNDELIV	6/3/2019 4:49:00 PM	6/3/2019 4:49:21 PM	6/3/2019 5:19:28 PM	DraftEnvironmentalAuthorisationAmendmentReport submitted toDepartment ofEnvironmentalAffairs for Aletta Wind Farms near Copperton on 03/06/19. Info 0117980600	Aletta WEF	EA Amendment Motivation Report
27787409156	MTN	EXPIRED	6/3/2019 4:49:00 PM	6/3/2019 4:49:21 PM	6/3/2019 9:07:34 PM	DraftEnvironmentalAuthorisationAmendmentReport submitted toDepartment ofEnvironmentalAffairs for Aletta Wind Farms near Copperton on 03/06/19. Info 0117980600	Aletta WEF	EA Amendment Motivation Report
27847249720	CELL C	EXPIRED	6/3/2019 4:49:00 PM	6/3/2019 4:49:21 PM	6/3/2019 9:07:34 PM	DraftEnvironmentalAuthorisationAmendmentReport submitted toDepartment ofEnvironmentalAffairs for Aletta Wind Farms near Copperton on 03/06/19. Info 0117980600	Aletta WEF	EA Amendment Motivation Report
27743150397	CELL C	DELIVRD	6/3/2019 4:49:00 PM	6/3/2019 4:49:21 PM	6/3/2019 4:49:22 PM	DraftEnvironmentalAuthorisationAmendmentReport submitted toDepartment ofEnvironmentalAffairs for Aletta Wind Farms near Copperton on 03/06/19. Info 0117980600	Aletta WEF	EA Amendment Motivation Report
27638395032	MTN	DELIVRD	6/3/2019 4:49:00 PM	6/3/2019 4:49:20 PM	6/3/2019 4:49:23 PM	DraftEnvironmentalAuthorisationAmendmentReport submitted toDepartment ofEnvironmentalAffairs for Aletta Wind Farms near Copperton on 03/06/19. Info 0117980600	Aletta WEF	EA Amendment Motivation Report
27787658161	MTN	EXPIRED	6/3/2019 4:49:00 PM	6/3/2019 4:49:21 PM	6/3/2019 9:07:34 PM	DraftEnvironmentalAuthorisationAmendmentReport submitted toDepartment ofEnvironmentalAffairs for Aletta Wind Farms near Copperton on 03/06/19. Info 0117980600	Aletta WEF	EA Amendment Motivation Report
27847486465	CELL C	EXPIRED	6/3/2019 4:49:00 PM	6/3/2019 4:49:21 PM	6/3/2019 9:07:34 PM	DraftEnvironmentalAuthorisationAmendmentReport submitted toDepartment ofEnvironmentalAffairs for Aletta Wind Farms near Copperton on 03/06/19. Info 0117980600	Aletta WEF	EA Amendment Motivation Report
27745831341	CELL C	DELIVRD	6/3/2019 4:49:00 PM	6/3/2019 4:49:21 PM	6/3/2019 4:54:43 PM	DraftEnvironmentalAuthorisationAmendmentReport submitted toDepartment ofEnvironmentalAffairs for Aletta Wind Farms near Copperton on 03/06/19. Info 0117980600	Aletta WEF	EA Amendment Motivation Report
27638986718	MTN	EXPIRED	6/3/2019 4:49:00 PM	6/3/2019 4:49:21 PM	6/3/2019 9:07:34 PM	DraftEnvironmentalAuthorisationAmendmentReport submitted toDepartment ofEnvironmentalAffairs for Aletta Wind Farms near Copperton on 03/06/19. Info 0117980600	Aletta WEF	EA Amendment Motivation Report
27787804636	MTN	EXPIRED	6/3/2019 4:49:00 PM	6/3/2019 4:49:21 PM	6/3/2019 9:07:34 PM	DraftEnvironmentalAuthorisationAmendmentReport submitted toDepartment ofEnvironmentalAffairs for Aletta Wind Farms near Copperton on 03/06/19. Info 0117980600	Aletta WEF	EA Amendment Motivation Report

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27847999489	CELL C	UNDELIV	6/3/2019 4:49:00 PM	6/3/2019 4:49:21 PM	6/3/2019 5:19:30 PM	DraftEnvironmentalAuthorisationAmendmentReport submitted toDepartment ofEnvironmentalAffairs for Aletta Wind Farms near Copperton on 03/06/19. Info 0117980600	Aletta WEF	EA Amendment Motivation Report
27746082390	CELL C	DELIVRD	6/3/2019 4:49:00 PM	6/3/2019 4:49:21 PM	6/3/2019 4:49:25 PM	DraftEnvironmentalAuthorisationAmendmentReport submitted toDepartment ofEnvironmentalAffairs for Aletta Wind Farms near Copperton on 03/06/19. Info 0117980600	Aletta WEF	EA Amendment Motivation Report
27787820588	MTN	DELIVRD	6/3/2019 4:49:00 PM	6/3/2019 4:49:21 PM	6/3/2019 4:49:24 PM	DraftEnvironmentalAuthorisationAmendmentReport submitted toDepartment ofEnvironmentalAffairs for Aletta Wind Farms near Copperton on 03/06/19. Info 0117980600	Aletta WEF	EA Amendment Motivation Report
27642257321	CELL C	UNDELIV	6/3/2019 4:49:00 PM	6/3/2019 4:49:21 PM	6/3/2019 5:19:30 PM	DraftEnvironmentalAuthorisationAmendmentReport submitted toDepartment ofEnvironmentalAffairs for Aletta Wind Farms near Copperton on 03/06/19. Info 0117980600	Aletta WEF	EA Amendment Motivation Report
27746138638	CELL C	UNDELIV	6/3/2019 4:49:00 PM	6/3/2019 4:49:21 PM	6/3/2019 5:19:30 PM	DraftEnvironmentalAuthorisationAmendmentReport submitted toDepartment ofEnvironmentalAffairs for Aletta Wind Farms near Copperton on 03/06/19. Info 0117980600	Aletta WEF	EA Amendment Motivation Report
27788169418	MTN	EXPIRED	6/3/2019 4:49:00 PM	6/3/2019 4:49:20 PM	6/3/2019 9:07:34 PM	DraftEnvironmentalAuthorisationAmendmentReport submitted toDepartment ofEnvironmentalAffairs for Aletta Wind Farms near Copperton on 03/06/19. Info 0117980600	Aletta WEF	EA Amendment Motivation Report
27643413234	CELL C	DELIVRD	6/3/2019 4:49:00 PM	6/3/2019 4:49:21 PM	6/3/2019 4:49:22 PM	DraftEnvironmentalAuthorisationAmendmentReport submitted toDepartment ofEnvironmentalAffairs for Aletta Wind Farms near Copperton on 03/06/19. Info 0117980600	Aletta WEF	EA Amendment Motivation Report
27747447466	CELL C	DELIVRD	6/3/2019 4:49:00 PM	6/3/2019 4:49:21 PM	6/3/2019 4:49:27 PM	DraftEnvironmentalAuthorisationAmendmentReport submitted toDepartment ofEnvironmentalAffairs for Aletta Wind Farms near Copperton on 03/06/19. Info 0117980600	Aletta WEF	EA Amendment Motivation Report
27789423122	MTN	DELIVRD	6/3/2019 4:49:00 PM	6/3/2019 4:49:21 PM	6/3/2019 4:49:23 PM	DraftEnvironmentalAuthorisationAmendmentReport submitted toDepartment ofEnvironmentalAffairs for Aletta Wind Farms near Copperton on 03/06/19. Info 0117980600	Aletta WEF	EA Amendment Motivation Report
27710907595	CELL C	DELIVRD	6/3/2019 4:49:00 PM	6/3/2019 4:49:21 PM	6/3/2019 4:49:23 PM	DraftEnvironmentalAuthorisationAmendmentReport submitted toDepartment ofEnvironmentalAffairs for Aletta Wind Farms near Copperton on 03/06/19. Info 0117980600	Aletta WEF	EA Amendment Motivation Report
27747737098	CELL C	EXPIRED	6/3/2019 4:49:00 PM	6/3/2019 4:49:21 PM	6/3/2019 9:07:34 PM	DraftEnvironmentalAuthorisationAmendmentReport submitted toDepartment ofEnvironmentalAffairs for Aletta Wind Farms near Copperton on 03/06/19. Info 0117980600	Aletta WEF	EA Amendment Motivation Report
27789432676	MTN	UNDELIV	6/3/2019 4:49:00 PM	6/3/2019 4:49:21 PM	6/3/2019 5:19:28 PM	DraftEnvironmentalAuthorisationAmendmentReport submitted toDepartment ofEnvironmentalAffairs for Aletta Wind Farms near Copperton on 03/06/19. Info 0117980600	Aletta WEF	EA Amendment Motivation Report

27712547827	Vodacom	EXPIRED	6/3/2019 4:49:00 PM	6/3/2019 4:49:21 PM		DraftEnvironmentalAuthorisationAmendmentReport submitted toDepartment ofEnvironmentalAffairs for Aletta Wind Farms near Copperton on 03/06/19. Info 0117980600	Aletta WEF	EA Amendment Motivation Report
27790127660	Vodacom	DELIVRD	6/3/2019 4:49:00 PM	6/3/2019 4:49:21 PM	6/3/2019 4:49:26 PM	DraftEnvironmentalAuthorisationAmendmentReport submitted toDepartment ofEnvironmentalAffairs for Aletta Wind Farms near Copperton on 03/06/19. Info 0117980600	Aletta WEF	EA Amendment Motivation Report
27712697114	MTN	DELIVRD	6/3/2019 4:49:00 PM	6/3/2019 4:49:20 PM		DraftEnvironmentalAuthorisationAmendmentReport submitted toDepartment ofEnvironmentalAffairs for Aletta Wind Farms near Copperton on 03/06/19. Info 0117980600	Aletta WEF	EA Amendment Motivation Report
27790393540	Vodacom	DELIVRD	6/3/2019 4:49:00 PM	6/3/2019 4:49:21 PM	6/3/2019 4:54:44 PM	DraftEnvironmentalAuthorisationAmendmentReport submitted toDepartment ofEnvironmentalAffairs for Aletta Wind Farms near Copperton on 03/06/19. Info 0117980600	Aletta WEF	EA Amendment Motivation Report
27714884010	Vodacom	DELIVRD	6/3/2019 4:49:00 PM	6/3/2019 4:49:21 PM	6/3/2019 4:49:24 PM	DraftEnvironmentalAuthorisationAmendmentReport submitted toDepartment ofEnvironmentalAffairs for Aletta Wind Farms near Copperton on 03/06/19. Info 0117980600	Aletta WEF	EA Amendment Motivation Report
27790511870	Vodacom	DELIVRD	6/3/2019 4:49:00 PM	6/3/2019 4:49:21 PM	6/3/2019 4:49:28 PM	DraftEnvironmentalAuthorisationAmendmentReport submitted toDepartment ofEnvironmentalAffairs for Aletta Wind Farms near Copperton on 03/06/19. Info 0117980600	Aletta WEF	EA Amendment Motivation Report
27717378974	MTN	EXPIRED	6/3/2019 4:49:00 PM	6/3/2019 4:49:21 PM		DraftEnvironmentalAuthorisationAmendmentReport submitted toDepartment ofEnvironmentalAffairs for Aletta Wind Farms near Copperton on 03/06/19. Info 0117980600	Aletta WEF	EA Amendment Motivation Report
27790564159	Vodacom	DELIVRD	6/3/2019 4:49:00 PM	6/3/2019 4:49:21 PM	6/3/2019 6:04:48 PM	DraftEnvironmentalAuthorisationAmendmentReport submitted toDepartment ofEnvironmentalAffairs for Aletta Wind Farms near Copperton on 03/06/19. Info 0117980600	Aletta WEF	EA Amendment Motivation Report
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Phonenumber	Network	Status	Scheduled Date	Submitted Date	Status Date	Sent Data	Group Name	Group Description
27717439480	MTN	EXPIRED	6/4/2019 2:19:00 PM	6/4/2019 2:19:26 PM	6/4/2019 8:07:19 PM	Konsep Omgewingsautoriseringsverslag aan die Departement van Omgewingsake vir Aletta Windplaas naby Copperton op 03 Junie 2019. Inligting Stephan 0117980600.	Aletta WEF	EA Amendment Motivation Report
27603724940	MTN	DELIVRD	6/4/2019 2:19:00 PM	6/4/2019 2:19:26 PM	6/4/2019 2:19:34 PM	Konsep Omgewingsautoriseringsverslag aan die Departement van Omgewingsake vir Aletta Windplaas naby Copperton op 03 Junie 2019. Inligting Stephan 0117980600.	Aletta WEF	EA Amendment Motivation Report
27748391704	CELL C	UNDELIV	6/4/2019 2:19:00 PM	6/4/2019 2:19:26 PM	6/4/2019 2:49:35 PM	Konsep Omgewingsautoriseringsverslag aan die Departement van Omgewingsake vir Aletta Windplaas naby Copperton op 03 Junie 2019. Inligting Stephan 0117980600.	Aletta WEF	EA Amendment Motivation Report
27791602355	Vodacom	DELIVRD	6/4/2019 2:19:00 PM	6/4/2019 2:19:26 PM	6/4/2019 2:19:31 PM	Konsep Omgewingsautoriseringsverslag aan die Departement van Omgewingsake vir Aletta Windplaas naby Copperton op 03 Junie 2019. Inligting Stephan 0117980600.	Aletta WEF	EA Amendment Motivation Report
27603949074	MTN	EXPIRED	6/4/2019 2:19:00 PM	6/4/2019 2:19:26 PM	6/4/2019 8:07:19 PM	Konsep Omgewingsautoriseringsverslag aan die Departement van Omgewingsake vir Aletta Windplaas naby Copperton op 03 Junie 2019. Inligting Stephan 0117980600.	Aletta WEF	EA Amendment Motivation Report
27749095063	CELL C	DELIVRD	6/4/2019 2:19:00 PM	6/4/2019 2:19:26 PM	6/4/2019 2:19:31 PM	Konsep Omgewingsautoriseringsverslag aan die Departement van Omgewingsake vir Aletta Windplaas naby Copperton op 03 Junie 2019. Inligting Stephan 0117980600.	Aletta WEF	EA Amendment Motivation Report
27792218471	CELL C	UNDELIV	6/4/2019 2:19:00 PM	6/4/2019 2:19:26 PM	6/4/2019 2:49:35 PM	Konsep Omgewingsautoriseringsverslag aan die Departement van Omgewingsake vir Aletta Windplaas naby Copperton op 03 Junie 2019. Inligting Stephan 0117980600.	Aletta WEF	EA Amendment Motivation Report
27604384216	CELL C	DELIVRD	6/4/2019 2:19:00 PM	6/4/2019 2:19:26 PM	6/4/2019 2:19:32 PM	Konsep Omgewingsautoriseringsverslag aan die Departement van Omgewingsake vir Aletta Windplaas naby Copperton op 03 Junie 2019. Inligting Stephan 0117980600.	Aletta WEF	EA Amendment Motivation Report
27749301112	CELL C	EXPIRED	6/4/2019 2:19:00 PM	6/4/2019 2:19:26 PM	6/4/2019 8:07:19 PM	Konsep Omgewingsautoriseringsverslag aan die Departement van Omgewingsake vir Aletta Windplaas naby Copperton op 03 Junie 2019. Inligting Stephan 0117980600.	Aletta WEF	EA Amendment Motivation Report
27606868806	Vodacom	DELIVRD	6/4/2019 2:19:00 PM	6/4/2019 2:19:26 PM	6/4/2019 2:19:33 PM	Konsep Omgewingsautoriseringsverslag aan die Departement van Omgewingsake vir Aletta Windplaas naby Copperton op 03 Junie 2019. Inligting Stephan 0117980600.	Aletta WEF	EA Amendment Motivation Report
27793505404	Vodacom	EXPIRED	6/4/2019 2:19:00 PM	6/4/2019 2:19:26 PM	6/4/2019 8:07:19 PM	Konsep Omgewingsautoriseringsverslag aan die Departement van Omgewingsake vir Aletta Windplaas naby Copperton op 03 Junie 2019. Inligting Stephan 0117980600.	Aletta WEF	EA Amendment Motivation Report

27749387464	CELL C	EXPIRED	6/4/2019 2:19:00 PM	6/4/2019 2:19:26 PM	6/4/2019 8:07:19 PM	Konsep Omgewingsautoriseringsverslag aan die Departement van Omgewingsake vir Aletta Windplaas naby Copperton op 03 Junie 2019. Inligting Stephan 0117980600.	Aletta WEF	EA Amendment Motivation Report
27609042642	Vodacom	DELIVRD	6/4/2019 2:19:00 PM	6/4/2019 2:19:26 PM	6/4/2019 2:19:30 PM	Konsep Omgewingsautoriseringsverslag aan die Departement van Omgewingsake vir Aletta Windplaas naby Copperton op 03 Junie 2019. Inligting Stephan 0117980600.	Aletta WEF	EA Amendment Motivation Report
27794005847	CELL C	EXPIRED	6/4/2019 2:19:00 PM	6/4/2019 2:19:26 PM	6/4/2019 8:07:19 PM	Konsep Omgewingsautoriseringsverslag aan die Departement van Omgewingsake vir Aletta Windplaas naby Copperton op 03 Junie 2019. Inligting Stephan 0117980600.	Aletta WEF	EA Amendment Motivation Report
27749454697	CELL C	UNDELIV	6/4/2019 2:19:00 PM	6/4/2019 2:19:26 PM	6/4/2019 2:49:40 PM	Konsep Omgewingsautoriseringsverslag aan die Departement van Omgewingsake vir Aletta Windplaas naby Copperton op 03 Junie 2019. Inligting Stephan 0117980600.	Aletta WEF	EA Amendment Motivation Report
27609202393	Vodacom	DELIVRD	6/4/2019 2:19:00 PM	6/4/2019 2:19:26 PM	6/4/2019 2:19:31 PM	Konsep Omgewingsautoriseringsverslag aan die Departement van Omgewingsake vir Aletta Windplaas naby Copperton op 03 Junie 2019. Inligting Stephan 0117980600.	Aletta WEF	EA Amendment Motivation Report
27794015261	Vodacom	UNDELIV	6/4/2019 2:19:00 PM	6/4/2019 2:19:26 PM	6/4/2019 2:49:39 PM	Konsep Omgewingsautoriseringsverslag aan die Departement van Omgewingsake vir Aletta Windplaas naby Copperton op 03 Junie 2019. Inligting Stephan 0117980600.	Aletta WEF	EA Amendment Motivation Report
27760911238	Vodacom	UNDELIV	6/4/2019 2:19:00 PM	6/4/2019 2:19:26 PM	6/4/2019 2:49:39 PM	Konsep Omgewingsautoriseringsverslag aan die Departement van Omgewingsake vir Aletta Windplaas naby Copperton op 03 Junie 2019. Inligting Stephan 0117980600.	Aletta WEF	EA Amendment Motivation Report
27610046934	CELL C	DELIVRD	6/4/2019 2:19:00 PM	6/4/2019 2:19:26 PM	6/4/2019 2:19:28 PM	Konsep Omgewingsautoriseringsverslag aan die Departement van Omgewingsake vir Aletta Windplaas naby Copperton op 03 Junie 2019. Inligting Stephan 0117980600.	Aletta WEF	EA Amendment Motivation Report
27717528568	MTN	DELIVRD	6/4/2019 2:19:00 PM	6/4/2019 2:19:26 PM	6/4/2019 2:19:32 PM	Konsep Omgewingsautoriseringsverslag aan die Departement van Omgewingsake vir Aletta Windplaas naby Copperton op 03 Junie 2019. Inligting Stephan 0117980600.	Aletta WEF	EA Amendment Motivation Report
27794202764	CELL C	DELIVRD	6/4/2019 2:19:00 PM	6/4/2019 2:19:26 PM	6/4/2019 2:19:41 PM	Konsep Omgewingsautoriseringsverslag aan die Departement van Omgewingsake vir Aletta Windplaas naby Copperton op 03 Junie 2019. Inligting Stephan 0117980600.	Aletta WEF	EA Amendment Motivation Report
27760965959	CELL C	DELIVRD	6/4/2019 2:19:00 PM	6/4/2019 2:19:26 PM	6/4/2019 2:19:30 PM	Konsep Omgewingsautoriseringsverslag aan die Departement van Omgewingsake vir Aletta Windplaas naby Copperton op 03 Junie 2019. Inligting Stephan 0117980600.	Aletta WEF	EA Amendment Motivation Report
27610065636	CELL C	UNDELIV	6/4/2019 2:19:00 PM	6/4/2019 2:19:26 PM	6/4/2019 2:49:34 PM	Konsep Omgewingsautoriseringsverslag aan die Departement van Omgewingsake vir Aletta Windplaas naby Copperton op 03 Junie 2019. Inligting Stephan 0117980600.	Aletta WEF	EA Amendment Motivation Report

27794965972	Telkom Mobile	UNDELIV	6/4/2019 2:19:00 PM	6/4/2019 2:19:26 PM	6/4/2019 2:19:29 PM	Konsep Omgewingsautoriseringsverslag aan die Departement van Omgewingsake vir Aletta Windplaas naby Copperton op 03 Junie 2019. Inligting Stephan 0117980600.	Aletta WEF	EA Amendment Motivation Report
27610297639	CELL C	EXPIRED	6/4/2019 2:19:00 PM	6/4/2019 2:19:26 PM	6/4/2019 8:07:19 PM	Konsep Omgewingsautoriseringsverslag aan die Departement van Omgewingsake vir Aletta Windplaas naby Copperton op 03 Junie 2019. Inligting Stephan 0117980600.	Aletta WEF	EA Amendment Motivation Report
27762766484	Vodacom	EXPIRED	6/4/2019 2:19:00 PM	6/4/2019 2:19:26 PM	6/4/2019 8:07:19 PM	Konsep Omgewingsautoriseringsverslag aan die Departement van Omgewingsake vir Aletta Windplaas naby Copperton op 03 Junie 2019. Inligting Stephan 0117980600.	Aletta WEF	EA Amendment Motivation Report
27796366502	Vodacom	UNDELIV	6/4/2019 2:19:00 PM	6/4/2019 2:19:26 PM	6/4/2019 2:49:39 PM	Konsep Omgewingsautoriseringsverslag aan die Departement van Omgewingsake vir Aletta Windplaas naby Copperton op 03 Junie 2019. Inligting Stephan 0117980600.	Aletta WEF	EA Amendment Motivation Report
27762956229	CELL C	DELIVRD	6/4/2019 2:19:00 PM	6/4/2019 2:19:26 PM	6/4/2019 2:19:32 PM	Konsep Omgewingsautoriseringsverslag aan die Departement van Omgewingsake vir Aletta Windplaas naby Copperton op 03 Junie 2019. Inligting Stephan 0117980600.	Aletta WEF	EA Amendment Motivation Report
27612162957	CELL C	DELIVRD	6/4/2019 2:19:00 PM	6/4/2019 2:19:26 PM	6/4/2019 2:19:34 PM	Konsep Omgewingsautoriseringsverslag aan die Departement van Omgewingsake vir Aletta Windplaas naby Copperton op 03 Junie 2019. Inligting Stephan 0117980600.	Aletta WEF	EA Amendment Motivation Report
27765303880	Vodacom	EXPIRED	6/4/2019 2:19:00 PM	6/4/2019 2:19:26 PM	6/4/2019 8:07:19 PM	Konsep Omgewingsautoriseringsverslag aan die Departement van Omgewingsake vir Aletta Windplaas naby Copperton op 03 Junie 2019. Inligting Stephan 0117980600.	Aletta WEF	EA Amendment Motivation Report
27799057743	CELL C	EXPIRED	6/4/2019 2:19:00 PM	6/4/2019 2:19:26 PM	6/4/2019 8:07:19 PM	Konsep Omgewingsautoriseringsverslag aan die Departement van Omgewingsake vir Aletta Windplaas naby Copperton op 03 Junie 2019. Inligting Stephan 0117980600.	Aletta WEF	EA Amendment Motivation Report
27613143121	CELL C	EXPIRED	6/4/2019 2:19:00 PM	6/4/2019 2:19:26 PM	6/4/2019 8:07:19 PM	Konsep Omgewingsautoriseringsverslag aan die Departement van Omgewingsake vir Aletta Windplaas naby Copperton op 03 Junie 2019. Inligting Stephan 0117980600.	Aletta WEF	EA Amendment Motivation Report
27799785149	CELL C	EXPIRED	6/4/2019 2:19:00 PM	6/4/2019 2:19:26 PM	6/4/2019 8:07:19 PM	Konsep Omgewingsautoriseringsverslag aan die Departement van Omgewingsake vir Aletta Windplaas naby Copperton op 03 Junie 2019. Inligting Stephan 0117980600.	Aletta WEF	EA Amendment Motivation Report
27765414664	MTN	EXPIRED	6/4/2019 2:19:00 PM	6/4/2019 2:19:26 PM	6/4/2019 8:07:19 PM	Konsep Omgewingsautoriseringsverslag aan die Departement van Omgewingsake vir Aletta Windplaas naby Copperton op 03 Junie 2019. Inligting Stephan 0117980600.	Aletta WEF	EA Amendment Motivation Report
27613352603	CELL C	UNDELIV	6/4/2019 2:19:00 PM	6/4/2019 2:19:26 PM	6/4/2019 2:49:34 PM	Konsep Omgewingsautoriseringsverslag aan die Departement van Omgewingsake vir Aletta Windplaas naby Copperton op 03 Junie 2019. Inligting Stephan 0117980600.	Aletta WEF	EA Amendment Motivation Report

27810764770	MTN	EXPIRED	6/4/2019 2:19:00 PM	6/4/2019 2:19:26 PM	6/4/2019 8:07:19 PM	Konsep Omgewingsautoriseringsverslag aan die Departement van Omgewingsake vir Aletta Windplaas naby Copperton op 03 Junie 2019. Inligting Stephan 0117980600.	Aletta WEF	EA Amendment Motivation Report
27717957630	MTN	DELIVRD	6/4/2019 2:19:00 PM	6/4/2019 2:19:26 PM	6/4/2019 2:19:31 PM	Konsep Omgewingsautoriseringsverslag aan die Departement van Omgewingsake vir Aletta Windplaas naby Copperton op 03 Junie 2019. Inligting Stephan 0117980600.	Aletta WEF	EA Amendment Motivation Report
27766999711	Vodacom	DELIVRD	6/4/2019 2:19:00 PM	6/4/2019 2:19:26 PM	6/4/2019 2:19:30 PM	Konsep Omgewingsautoriseringsverslag aan die Departement van Omgewingsake vir Aletta Windplaas naby Copperton op 03 Junie 2019. Inligting Stephan 0117980600.	Aletta WEF	EA Amendment Motivation Report
27613361525	CELL C	UNDELIV	6/4/2019 2:19:00 PM	6/4/2019 2:19:26 PM	6/4/2019 2:49:34 PM	Konsep Omgewingsautoriseringsverslag aan die Departement van Omgewingsake vir Aletta Windplaas naby Copperton op 03 Junie 2019. Inligting Stephan 0117980600.	Aletta WEF	EA Amendment Motivation Report
27818613233	Vodacom	DELIVRD	6/4/2019 2:19:00 PM	6/4/2019 2:19:26 PM	6/4/2019 2:19:29 PM	Konsep Omgewingsautoriseringsverslag aan die Departement van Omgewingsake vir Aletta Windplaas naby Copperton op 03 Junie 2019. Inligting Stephan 0117980600.	Aletta WEF	EA Amendment Motivation Report
27767724178	Vodacom	UNDELIV	6/4/2019 2:19:00 PM	6/4/2019 2:19:26 PM	6/4/2019 2:49:39 PM	Konsep Omgewingsautoriseringsverslag aan die Departement van Omgewingsake vir Aletta Windplaas naby Copperton op 03 Junie 2019. Inligting Stephan 0117980600.	Aletta WEF	EA Amendment Motivation Report
27613663277	CELL C	DELIVRD	6/4/2019 2:19:00 PM	6/4/2019 2:19:26 PM	6/4/2019 2:19:32 PM	Konsep Omgewingsautoriseringsverslag aan die Departement van Omgewingsake vir Aletta Windplaas naby Copperton op 03 Junie 2019. Inligting Stephan 0117980600.	Aletta WEF	EA Amendment Motivation Report
27718311455	MTN	DELIVRD	6/4/2019 2:19:00 PM	6/4/2019 2:19:26 PM	6/4/2019 2:19:40 PM	Konsep Omgewingsautoriseringsverslag aan die Departement van Omgewingsake vir Aletta Windplaas naby Copperton op 03 Junie 2019. Inligting Stephan 0117980600.	Aletta WEF	EA Amendment Motivation Report
27768222172	Vodacom	DELIVRD	6/4/2019 2:19:00 PM	6/4/2019 2:19:26 PM	6/4/2019 2:19:30 PM	Konsep Omgewingsautoriseringsverslag aan die Departement van Omgewingsake vir Aletta Windplaas naby Copperton op 03 Junie 2019. Inligting Stephan 0117980600.	Aletta WEF	EA Amendment Motivation Report
27820527968	CELL C	DELIVRD	6/4/2019 2:19:00 PM	6/4/2019 2:19:26 PM	6/4/2019 2:19:33 PM	Konsep Omgewingsautoriseringsverslag aan die Departement van Omgewingsake vir Aletta Windplaas naby Copperton op 03 Junie 2019. Inligting Stephan 0117980600.	Aletta WEF	EA Amendment Motivation Report
27718358405	MTN	EXPIRED	6/4/2019 2:19:00 PM	6/4/2019 2:19:26 PM	6/4/2019 8:07:19 PM	Konsep Omgewingsautoriseringsverslag aan die Departement van Omgewingsake vir Aletta Windplaas naby Copperton op 03 Junie 2019. Inligting Stephan 0117980600.	Aletta WEF	EA Amendment Motivation Report
27768645738	Vodacom	DELIVRD	6/4/2019 2:19:00 PM	6/4/2019 2:19:26 PM	6/4/2019 2:19:32 PM	Konsep Omgewingsautoriseringsverslag aan die Departement van Omgewingsake vir Aletta Windplaas naby Copperton op 03 Junie 2019. Inligting Stephan 0117980600.	Aletta WEF	EA Amendment Motivation Report

27719064333	MTN	DELIVRD	6/4/2019 2:19:00 PM	6/4/2019 2:19:26 PM	6/4/2019 2:19:34 PM	Konsep Omgewingsautoriseringsverslag aan die Departement van Omgewingsake vir Aletta Windplaas naby Copperton op 03 Junie 2019. Inligting Stephan 0117980600.	Aletta WEF	EA Amendment Motivation Report
27822111011	Vodacom	DELIVRD	6/4/2019 2:19:00 PM	6/4/2019 2:19:26 PM	6/4/2019 2:19:29 PM	Konsep Omgewingsautoriseringsverslag aan die Departement van Omgewingsake vir Aletta Windplaas naby Copperton op 03 Junie 2019. Inligting Stephan 0117980600.	Aletta WEF	EA Amendment Motivation Report
27769342586	Vodacom	DELIVRD	6/4/2019 2:19:00 PM	6/4/2019 2:19:26 PM	6/4/2019 2:19:33 PM	Konsep Omgewingsautoriseringsverslag aan die Departement van Omgewingsake vir Aletta Windplaas naby Copperton op 03 Junie 2019. Inligting Stephan 0117980600.	Aletta WEF	EA Amendment Motivation Report
27719588197	MTN	DELIVRD	6/4/2019 2:19:00 PM	6/4/2019 2:19:26 PM	6/4/2019 2:19:29 PM	Konsep Omgewingsautoriseringsverslag aan die Departement van Omgewingsake vir Aletta Windplaas naby Copperton op 03 Junie 2019. Inligting Stephan 0117980600.	Aletta WEF	EA Amendment Motivation Report
27824012767	Vodacom	EXPIRED	6/4/2019 2:19:00 PM	6/4/2019 2:19:26 PM	6/4/2019 8:07:19 PM	Konsep Omgewingsautoriseringsverslag aan die Departement van Omgewingsake vir Aletta Windplaas naby Copperton op 03 Junie 2019. Inligting Stephan 0117980600.	Aletta WEF	EA Amendment Motivation Report
27769393565	Vodacom	DELIVRD	6/4/2019 2:19:00 PM	6/4/2019 2:19:26 PM	6/4/2019 2:19:33 PM	Konsep Omgewingsautoriseringsverslag aan die Departement van Omgewingsake vir Aletta Windplaas naby Copperton op 03 Junie 2019. Inligting Stephan 0117980600.	Aletta WEF	EA Amendment Motivation Report
27719684952	MTN	DELIVRD	6/4/2019 2:19:00 PM	6/4/2019 2:19:26 PM	6/4/2019 2:19:31 PM	Konsep Omgewingsautoriseringsverslag aan die Departement van Omgewingsake vir Aletta Windplaas naby Copperton op 03 Junie 2019. Inligting Stephan 0117980600.	Aletta WEF	EA Amendment Motivation Report
27824759348	MTN	DELIVRD	6/4/2019 2:19:00 PM	6/4/2019 2:19:26 PM	6/4/2019 2:19:32 PM	Konsep Omgewingsautoriseringsverslag aan die Departement van Omgewingsake vir Aletta Windplaas naby Copperton op 03 Junie 2019. Inligting Stephan 0117980600.	Aletta WEF	EA Amendment Motivation Report
27780171707	MTN	EXPIRED	6/4/2019 2:19:00 PM	6/4/2019 2:19:26 PM	6/4/2019 8:07:19 PM	Konsep Omgewingsautoriseringsverslag aan die Departement van Omgewingsake vir Aletta Windplaas naby Copperton op 03 Junie 2019. Inligting Stephan 0117980600.	Aletta WEF	EA Amendment Motivation Report
27719709278	CELL C	DELIVRD	6/4/2019 2:19:00 PM	6/4/2019 2:19:26 PM	6/4/2019 2:19:29 PM	Konsep Omgewingsautoriseringsverslag aan die Departement van Omgewingsake vir Aletta Windplaas naby Copperton op 03 Junie 2019. Inligting Stephan 0117980600.	Aletta WEF	EA Amendment Motivation Report
27827263779	CELL C	UNDELIV	6/4/2019 2:19:00 PM	6/4/2019 2:19:26 PM	6/4/2019 2:49:41 PM	Konsep Omgewingsautoriseringsverslag aan die Departement van Omgewingsake vir Aletta Windplaas naby Copperton op 03 Junie 2019. Inligting Stephan 0117980600.	Aletta WEF	EA Amendment Motivation Report
27780298615	MTN	DELIVRD	6/4/2019 2:19:00 PM	6/4/2019 2:19:26 PM	6/4/2019 2:19:29 PM	Konsep Omgewingsautoriseringsverslag aan die Departement van Omgewingsake vir Aletta Windplaas naby Copperton op 03 Junie 2019. Inligting Stephan 0117980600.	Aletta WEF	EA Amendment Motivation Report

27828111705	Vodacom	EXPIRED	6/4/2019 2:19:00 PM	6/4/2019 2:19:26 PM	6/4/2019 8:07:19 PM	Konsep Omgewingsautoriseringsverslag aan die Departement van Omgewingsake vir Aletta Windplaas naby Copperton op 03 Junie 2019. Inligting Stephan 0117980600.	Aletta WEF	EA Amendment Motivation Report
27721263236	CELL C	EXPIRED	6/4/2019 2:19:00 PM	6/4/2019 2:19:26 PM	6/4/2019 8:07:19 PM	Konsep Omgewingsautoriseringsverslag aan die Departement van Omgewingsake vir Aletta Windplaas naby Copperton op 03 Junie 2019. Inligting Stephan 0117980600.	Aletta WEF	EA Amendment Motivation Report
27780395061	CELL C	DELIVRD	6/4/2019 2:19:00 PM	6/4/2019 2:19:26 PM	6/4/2019 2:19:28 PM	Konsep Omgewingsautoriseringsverslag aan die Departement van Omgewingsake vir Aletta Windplaas naby Copperton op 03 Junie 2019. Inligting Stephan 0117980600.	Aletta WEF	EA Amendment Motivation Report
27828276054	Vodacom	DELIVRD	6/4/2019 2:19:00 PM	6/4/2019 2:19:26 PM	6/4/2019 2:19:28 PM	Konsep Omgewingsautoriseringsverslag aan die Departement van Omgewingsake vir Aletta Windplaas naby Copperton op 03 Junie 2019. Inligting Stephan 0117980600.	Aletta WEF	EA Amendment Motivation Report
27723287134	CELL C	UNDELIV	6/4/2019 2:19:00 PM	6/4/2019 2:19:26 PM	6/4/2019 2:49:40 PM	Konsep Omgewingsautoriseringsverslag aan die Departement van Omgewingsake vir Aletta Windplaas naby Copperton op 03 Junie 2019. Inligting Stephan 0117980600.	Aletta WEF	EA Amendment Motivation Report
27832338644	MTN	DELIVRD	6/4/2019 2:19:00 PM	6/4/2019 2:19:26 PM	6/4/2019 2:19:28 PM	Konsep Omgewingsautoriseringsverslag aan die Departement van Omgewingsake vir Aletta Windplaas naby Copperton op 03 Junie 2019. Inligting Stephan 0117980600.	Aletta WEF	EA Amendment Motivation Report
27780621358	MTN	EXPIRED	6/4/2019 2:19:00 PM	6/4/2019 2:19:26 PM	6/4/2019 8:07:19 PM	Konsep Omgewingsautoriseringsverslag aan die Departement van Omgewingsake vir Aletta Windplaas naby Copperton op 03 Junie 2019. Inligting Stephan 0117980600.	Aletta WEF	EA Amendment Motivation Report
27616237843	CELL C	UNDELIV	6/4/2019 2:19:00 PM	6/4/2019 2:19:26 PM	6/4/2019 2:49:40 PM	Konsep Omgewingsautoriseringsverslag aan die Departement van Omgewingsake vir Aletta Windplaas naby Copperton op 03 Junie 2019. Inligting Stephan 0117980600.	Aletta WEF	EA Amendment Motivation Report
27723883323	Vodacom	DELIVRD	6/4/2019 2:19:00 PM	6/4/2019 2:19:26 PM	6/4/2019 2:19:30 PM	Konsep Omgewingsautoriseringsverslag aan die Departement van Omgewingsake vir Aletta Windplaas naby Copperton op 03 Junie 2019. Inligting Stephan 0117980600.	Aletta WEF	EA Amendment Motivation Report
27832483587	MTN	DELIVRD	6/4/2019 2:19:00 PM	6/4/2019 2:19:26 PM	6/4/2019 2:19:29 PM	Konsep Omgewingsautoriseringsverslag aan die Departement van Omgewingsake vir Aletta Windplaas naby Copperton op 03 Junie 2019. Inligting Stephan 0117980600.	Aletta WEF	EA Amendment Motivation Report
27780662176	CELL C	EXPIRED	6/4/2019 2:19:00 PM	6/4/2019 2:19:26 PM	6/4/2019 8:07:19 PM	Konsep Omgewingsautoriseringsverslag aan die Departement van Omgewingsake vir Aletta Windplaas naby Copperton op 03 Junie 2019. Inligting Stephan 0117980600.	Aletta WEF	EA Amendment Motivation Report
27616383672	CELL C	DELIVRD	6/4/2019 2:19:00 PM	6/4/2019 2:19:26 PM	6/4/2019 2:19:29 PM	Konsep Omgewingsautoriseringsverslag aan die Departement van Omgewingsake vir Aletta Windplaas naby Copperton op 03 Junie 2019. Inligting Stephan 0117980600.	Aletta WEF	EA Amendment Motivation Report

27723967561	Vodacom	DELIVRD	6/4/2019 2:19:00 PM	6/4/2019 2:19:26 PM	6/4/2019 2:19:32 PM	Konsep Omgewingsautoriseringsverslag aan die Departement van Omgewingsake vir Aletta Windplaas naby Copperton op 03 Junie 2019. Inligting Stephan 0117980600.	Aletta WEF	EA Amendment Motivation Report
27781181817	CELL C	EXPIRED	6/4/2019 2:19:00 PM	6/4/2019 2:19:26 PM	6/4/2019 8:07:19 PM	Konsep Omgewingsautoriseringsverslag aan die Departement van Omgewingsake vir Aletta Windplaas naby Copperton op 03 Junie 2019. Inligting Stephan 0117980600.	Aletta WEF	EA Amendment Motivation Report
27833386758	MTN	EXPIRED	6/4/2019 2:19:00 PM	6/4/2019 2:19:26 PM	6/4/2019 8:07:19 PM	Konsep Omgewingsautoriseringsverslag aan die Departement van Omgewingsake vir Aletta Windplaas naby Copperton op 03 Junie 2019. Inligting Stephan 0117980600.	Aletta WEF	EA Amendment Motivation Report
27617315273	CELL C	UNDELIV	6/4/2019 2:19:00 PM	6/4/2019 2:19:26 PM	6/4/2019 2:49:40 PM	Konsep Omgewingsautoriseringsverslag aan die Departement van Omgewingsake vir Aletta Windplaas naby Copperton op 03 Junie 2019. Inligting Stephan 0117980600.	Aletta WEF	EA Amendment Motivation Report
27724847131	Vodacom	DELIVRD	6/4/2019 2:19:00 PM	6/4/2019 2:19:26 PM	6/4/2019 2:19:32 PM	Konsep Omgewingsautoriseringsverslag aan die Departement van Omgewingsake vir Aletta Windplaas naby Copperton op 03 Junie 2019. Inligting Stephan 0117980600.	Aletta WEF	EA Amendment Motivation Report
27781188000	MTN	DELIVRD	6/4/2019 2:19:00 PM	6/4/2019 2:19:26 PM	6/4/2019 2:19:27 PM	Konsep Omgewingsautoriseringsverslag aan die Departement van Omgewingsake vir Aletta Windplaas naby Copperton op 03 Junie 2019. Inligting Stephan 0117980600.	Aletta WEF	EA Amendment Motivation Report
27834022548	MTN	DELIVRD	6/4/2019 2:19:00 PM	6/4/2019 2:19:26 PM	6/4/2019 2:19:31 PM	Konsep Omgewingsautoriseringsverslag aan die Departement van Omgewingsake vir Aletta Windplaas naby Copperton op 03 Junie 2019. Inligting Stephan 0117980600.	Aletta WEF	EA Amendment Motivation Report
27617708133	CELL C	UNDELIV	6/4/2019 2:19:00 PM	6/4/2019 2:19:26 PM	6/4/2019 2:49:41 PM	Konsep Omgewingsautoriseringsverslag aan die Departement van Omgewingsake vir Aletta Windplaas naby Copperton op 03 Junie 2019. Inligting Stephan 0117980600.	Aletta WEF	EA Amendment Motivation Report
27725704762	Vodacom	DELIVRD	6/4/2019 2:19:00 PM	6/4/2019 2:19:26 PM	6/4/2019 2:19:30 PM	Konsep Omgewingsautoriseringsverslag aan die Departement van Omgewingsake vir Aletta Windplaas naby Copperton op 03 Junie 2019. Inligting Stephan 0117980600.	Aletta WEF	EA Amendment Motivation Report
27781395878	MTN	DELIVRD	6/4/2019 2:19:00 PM	6/4/2019 2:19:26 PM	6/4/2019 2:19:32 PM	Konsep Omgewingsautoriseringsverslag aan die Departement van Omgewingsake vir Aletta Windplaas naby Copperton op 03 Junie 2019. Inligting Stephan 0117980600.	Aletta WEF	EA Amendment Motivation Report
27835128963	MTN	EXPIRED	6/4/2019 2:19:00 PM	6/4/2019 2:19:26 PM	6/4/2019 8:07:19 PM	Konsep Omgewingsautoriseringsverslag aan die Departement van Omgewingsake vir Aletta Windplaas naby Copperton op 03 Junie 2019. Inligting Stephan 0117980600.	Aletta WEF	EA Amendment Motivation Report
27726195399	Vodacom	EXPIRED	6/4/2019 2:19:00 PM	6/4/2019 2:19:26 PM	6/4/2019 8:07:19 PM	Konsep Omgewingsautoriseringsverslag aan die Departement van Omgewingsake vir Aletta Windplaas naby Copperton op 03 Junie 2019. Inligting Stephan 0117980600.	Aletta WEF	EA Amendment Motivation Report

27782747200	MTN	EXPIRED	6/4/2019 2:19:00 PM	6/4/2019 2:19:26 PM	6/4/2019 8:07:19 PM	Konsep Omgewingsautoriseringsverslag aan die Departement van Omgewingsake vir Aletta Windplaas naby Copperton op 03 Junie 2019. Inligting Stephan 0117980600.	Aletta WEF	EA Amendment Motivation Report
27618023706	CELL C	EXPIRED	6/4/2019 2:19:00 PM	6/4/2019 2:19:26 PM	6/4/2019 8:07:19 PM	Konsep Omgewingsautoriseringsverslag aan die Departement van Omgewingsake vir Aletta Windplaas naby Copperton op 03 Junie 2019. Inligting Stephan 0117980600.	Aletta WEF	EA Amendment Motivation Report
27835677289	MTN	EXPIRED	6/4/2019 2:19:00 PM	6/4/2019 2:19:26 PM	6/4/2019 8:07:19 PM	Konsep Omgewingsautoriseringsverslag aan die Departement van Omgewingsake vir Aletta Windplaas naby Copperton op 03 Junie 2019. Inligting Stephan 0117980600.	Aletta WEF	EA Amendment Motivation Report
27726853872	Vodacom	DELIVRD	6/4/2019 2:19:00 PM	6/4/2019 2:19:26 PM	6/4/2019 2:19:39 PM	Konsep Omgewingsautoriseringsverslag aan die Departement van Omgewingsake vir Aletta Windplaas naby Copperton op 03 Junie 2019. Inligting Stephan 0117980600.	Aletta WEF	EA Amendment Motivation Report
27783055701	MTN	DELIVRD	6/4/2019 2:19:00 PM	6/4/2019 2:19:26 PM	6/4/2019 2:19:32 PM	Konsep Omgewingsautoriseringsverslag aan die Departement van Omgewingsake vir Aletta Windplaas naby Copperton op 03 Junie 2019. Inligting Stephan 0117980600.	Aletta WEF	EA Amendment Motivation Report
27619068411	CELL C	UNDELIV	6/4/2019 2:19:00 PM	6/4/2019 2:19:26 PM	6/4/2019 2:49:35 PM	Konsep Omgewingsautoriseringsverslag aan die Departement van Omgewingsake vir Aletta Windplaas naby Copperton op 03 Junie 2019. Inligting Stephan 0117980600.	Aletta WEF	EA Amendment Motivation Report
27835795249	MTN	EXPIRED	6/4/2019 2:19:00 PM	6/4/2019 2:19:26 PM	6/4/2019 8:07:19 PM	Konsep Omgewingsautoriseringsverslag aan die Departement van Omgewingsake vir Aletta Windplaas naby Copperton op 03 Junie 2019. Inligting Stephan 0117980600.	Aletta WEF	EA Amendment Motivation Report
27727144380	Vodacom	DELIVRD	6/4/2019 2:19:00 PM	6/4/2019 2:19:26 PM	6/4/2019 2:19:34 PM	Konsep Omgewingsautoriseringsverslag aan die Departement van Omgewingsake vir Aletta Windplaas naby Copperton op 03 Junie 2019. Inligting Stephan 0117980600.	Aletta WEF	EA Amendment Motivation Report
27783098833	CELL C	UNDELIV	6/4/2019 2:19:00 PM	6/4/2019 2:19:26 PM	6/4/2019 2:49:35 PM	Konsep Omgewingsautoriseringsverslag aan die Departement van Omgewingsake vir Aletta Windplaas naby Copperton op 03 Junie 2019. Inligting Stephan 0117980600.	Aletta WEF	EA Amendment Motivation Report
27619083096	CELL C	EXPIRED	6/4/2019 2:19:00 PM	6/4/2019 2:19:26 PM	6/4/2019 8:07:19 PM	Konsep Omgewingsautoriseringsverslag aan die Departement van Omgewingsake vir Aletta Windplaas naby Copperton op 03 Junie 2019. Inligting Stephan 0117980600.	Aletta WEF	EA Amendment Motivation Report
27836841245	MTN	DELIVRD	6/4/2019 2:19:00 PM	6/4/2019 2:19:26 PM	6/4/2019 2:19:32 PM	Konsep Omgewingsautoriseringsverslag aan die Departement van Omgewingsake vir Aletta Windplaas naby Copperton op 03 Junie 2019. Inligting Stephan 0117980600.	Aletta WEF	EA Amendment Motivation Report
27727507126	Vodacom	EXPIRED	6/4/2019 2:19:00 PM	6/4/2019 2:19:26 PM	6/4/2019 8:07:19 PM	Konsep Omgewingsautoriseringsverslag aan die Departement van Omgewingsake vir Aletta Windplaas naby Copperton op 03 Junie 2019. Inligting Stephan 0117980600.	Aletta WEF	EA Amendment Motivation Report

27783435901	MTN	EXPIRED	6/4/2019 2:19:00 PM	6/4/2019 2:19:26 PM	6/4/2019 8:07:19 PM	Konsep Omgewingsautoriseringsverslag aan die Departement van Omgewingsake vir Aletta Windplaas naby Copperton op 03 Junie 2019. Inligting Stephan 0117980600.	Aletta WEF	EA Amendment Motivation Report
27619191578	CELL C	DELIVRD	6/4/2019 2:19:00 PM	6/4/2019 2:19:26 PM	6/4/2019 2:19:31 PM	Konsep Omgewingsautoriseringsverslag aan die Departement van Omgewingsake vir Aletta Windplaas naby Copperton op 03 Junie 2019. Inligting Stephan 0117980600.	Aletta WEF	EA Amendment Motivation Report
27837450378	MTN	DELIVRD	6/4/2019 2:19:00 PM	6/4/2019 2:19:26 PM	6/4/2019 2:19:32 PM	Konsep Omgewingsautoriseringsverslag aan die Departement van Omgewingsake vir Aletta Windplaas naby Copperton op 03 Junie 2019. Inligting Stephan 0117980600.	Aletta WEF	EA Amendment Motivation Report
27729024439	Vodacom	DELIVRD	6/4/2019 2:19:00 PM	6/4/2019 2:19:26 PM	6/4/2019 6:55:38 PM	Konsep Omgewingsautoriseringsverslag aan die Departement van Omgewingsake vir Aletta Windplaas naby Copperton op 03 Junie 2019. Inligting Stephan 0117980600.	Aletta WEF	EA Amendment Motivation Report
27784673567	MTN	DELIVRD	6/4/2019 2:19:00 PM	6/4/2019 2:19:26 PM	6/4/2019 3:30:35 PM	Konsep Omgewingsautoriseringsverslag aan die Departement van Omgewingsake vir Aletta Windplaas naby Copperton op 03 Junie 2019. Inligting Stephan 0117980600.	Aletta WEF	EA Amendment Motivation Report
27623695260	CELL C	UNDELIV	6/4/2019 2:19:00 PM	6/4/2019 2:19:26 PM	6/4/2019 2:49:35 PM	Konsep Omgewingsautoriseringsverslag aan die Departement van Omgewingsake vir Aletta Windplaas naby Copperton op 03 Junie 2019. Inligting Stephan 0117980600.	Aletta WEF	EA Amendment Motivation Report
27838782247	MTN	EXPIRED	6/4/2019 2:19:00 PM	6/4/2019 2:19:26 PM	6/4/2019 8:07:19 PM	Konsep Omgewingsautoriseringsverslag aan die Departement van Omgewingsake vir Aletta Windplaas naby Copperton op 03 Junie 2019. Inligting Stephan 0117980600.	Aletta WEF	EA Amendment Motivation Report
27730215253	MTN	EXPIRED	6/4/2019 2:19:00 PM	6/4/2019 2:19:26 PM	6/4/2019 8:07:19 PM	Konsep Omgewingsautoriseringsverslag aan die Departement van Omgewingsake vir Aletta Windplaas naby Copperton op 03 Junie 2019. Inligting Stephan 0117980600.	Aletta WEF	EA Amendment Motivation Report
27785039441	MTN	DELIVRD	6/4/2019 2:19:00 PM	6/4/2019 2:19:26 PM	6/4/2019 2:19:29 PM	Konsep Omgewingsautoriseringsverslag aan die Departement van Omgewingsake vir Aletta Windplaas naby Copperton op 03 Junie 2019. Inligting Stephan 0117980600.	Aletta WEF	EA Amendment Motivation Report
27730284410	MTN	DELIVRD	6/4/2019 2:19:00 PM	6/4/2019 2:19:26 PM	6/4/2019 2:34:40 PM	Konsep Omgewingsautoriseringsverslag aan die Departement van Omgewingsake vir Aletta Windplaas naby Copperton op 03 Junie 2019. Inligting Stephan 0117980600.	Aletta WEF	EA Amendment Motivation Report
27623752896	CELL C	EXPIRED	6/4/2019 2:19:00 PM	6/4/2019 2:19:26 PM	6/4/2019 8:07:19 PM	Konsep Omgewingsautoriseringsverslag aan die Departement van Omgewingsake vir Aletta Windplaas naby Copperton op 03 Junie 2019. Inligting Stephan 0117980600.	Aletta WEF	EA Amendment Motivation Report
27838830352	MTN	DELIVRD	6/4/2019 2:19:00 PM	6/4/2019 2:19:26 PM	6/4/2019 2:33:08 PM	Konsep Omgewingsautoriseringsverslag aan die Departement van Omgewingsake vir Aletta Windplaas naby Copperton op 03 Junie 2019. Inligting Stephan 0117980600.	Aletta WEF	EA Amendment Motivation Report

27730607030	MTN	UNDELIV	6/4/2019 2:19:00 PM	6/4/2019 2:19:26 PM	6/4/2019 2:49:32 PM	Konsep Omgewingsautoriseringsverslag aan die Departement van Omgewingsake vir Aletta Windplaas naby Copperton op 03 Junie 2019. Inligting Stephan 0117980600.	Aletta WEF	EA Amendment Motivation Report
27785164888	MTN	UNDELIV	6/4/2019 2:19:00 PM	6/4/2019 2:19:26 PM	6/4/2019 2:49:32 PM	Konsep Omgewingsautoriseringsverslag aan die Departement van Omgewingsake vir Aletta Windplaas naby Copperton op 03 Junie 2019. Inligting Stephan 0117980600.	Aletta WEF	EA Amendment Motivation Report
27624527392	CELL C	EXPIRED	6/4/2019 2:19:00 PM	6/4/2019 2:19:26 PM	6/4/2019 8:07:19 PM	Konsep Omgewingsautoriseringsverslag aan die Departement van Omgewingsake vir Aletta Windplaas naby Copperton op 03 Junie 2019. Inligting Stephan 0117980600.	Aletta WEF	EA Amendment Motivation Report
27838838119	MTN	DELIVRD	6/4/2019 2:19:00 PM	6/4/2019 2:19:26 PM	6/4/2019 2:19:30 PM	Konsep Omgewingsautoriseringsverslag aan die Departement van Omgewingsake vir Aletta Windplaas naby Copperton op 03 Junie 2019. Inligting Stephan 0117980600.	Aletta WEF	EA Amendment Motivation Report
27730845835	MTN	EXPIRED	6/4/2019 2:19:00 PM	6/4/2019 2:19:26 PM	6/4/2019 8:07:19 PM	Konsep Omgewingsautoriseringsverslag aan die Departement van Omgewingsake vir Aletta Windplaas naby Copperton op 03 Junie 2019. Inligting Stephan 0117980600.	Aletta WEF	EA Amendment Motivation Report
27785245013	MTN	DELIVRD	6/4/2019 2:19:00 PM	6/4/2019 2:19:26 PM	6/4/2019 2:19:30 PM	Konsep Omgewingsautoriseringsverslag aan die Departement van Omgewingsake vir Aletta Windplaas naby Copperton op 03 Junie 2019. Inligting Stephan 0117980600.	Aletta WEF	EA Amendment Motivation Report
27626315007	CELL C	DELIVRD	6/4/2019 2:19:00 PM	6/4/2019 2:19:26 PM	6/4/2019 3:34:59 PM	Konsep Omgewingsautoriseringsverslag aan die Departement van Omgewingsake vir Aletta Windplaas naby Copperton op 03 Junie 2019. Inligting Stephan 0117980600.	Aletta WEF	EA Amendment Motivation Report
27839262566	MTN	DELIVRD	6/4/2019 2:19:00 PM	6/4/2019 2:19:26 PM	6/4/2019 2:19:30 PM	Konsep Omgewingsautoriseringsverslag aan die Departement van Omgewingsake vir Aletta Windplaas naby Copperton op 03 Junie 2019. Inligting Stephan 0117980600.	Aletta WEF	EA Amendment Motivation Report
27785540066	MTN	DELIVRD	6/4/2019 2:19:00 PM	6/4/2019 2:19:26 PM	6/4/2019 2:19:37 PM	Konsep Omgewingsautoriseringsverslag aan die Departement van Omgewingsake vir Aletta Windplaas naby Copperton op 03 Junie 2019. Inligting Stephan 0117980600.	Aletta WEF	EA Amendment Motivation Report
27732012271	CELL C	EXPIRED	6/4/2019 2:19:00 PM	6/4/2019 2:19:26 PM	6/4/2019 8:07:19 PM	Konsep Omgewingsautoriseringsverslag aan die Departement van Omgewingsake vir Aletta Windplaas naby Copperton op 03 Junie 2019. Inligting Stephan 0117980600.	Aletta WEF	EA Amendment Motivation Report
27626633516	CELL C	EXPIRED	6/4/2019 2:19:00 PM	6/4/2019 2:19:26 PM	6/4/2019 8:07:19 PM	Konsep Omgewingsautoriseringsverslag aan die Departement van Omgewingsake vir Aletta Windplaas naby Copperton op 03 Junie 2019. Inligting Stephan 0117980600.	Aletta WEF	EA Amendment Motivation Report

27839874206	MTN	DELIVRD	6/4/2019 2:19:00 PM	6/4/2019 2:19:26 PM	6/4/2019 2:19:29 PM	Konsep Omgewingsautoriseringsverslag aan die Departement van Omgewingsake vir Aletta Windplaas naby Copperton op 03 Junie 2019. Inligting Stephan 0117980600.	Aletta WEF	EA Amendment Motivation Report
27785660226	MTN	UNDELIV	6/4/2019 2:19:00 PM	6/4/2019 2:19:26 PM	6/4/2019 2:49:32 PM	Konsep Omgewingsautoriseringsverslag aan die Departement van Omgewingsake vir Aletta Windplaas naby Copperton op 03 Junie 2019. Inligting Stephan 0117980600.	Aletta WEF	EA Amendment Motivation Report
27732150275	Vodacom	DELIVRD	6/4/2019 2:19:00 PM	6/4/2019 2:19:26 PM	6/4/2019 2:19:30 PM	Konsep Omgewingsautoriseringsverslag aan die Departement van Omgewingsake vir Aletta Windplaas naby Copperton op 03 Junie 2019. Inligting Stephan 0117980600.	Aletta WEF	EA Amendment Motivation Report
27628551704	CELL C	DELIVRD	6/4/2019 2:19:00 PM	6/4/2019 2:19:26 PM	6/4/2019 2:19:29 PM	Konsep Omgewingsautoriseringsverslag aan die Departement van Omgewingsake vir Aletta Windplaas naby Copperton op 03 Junie 2019. Inligting Stephan 0117980600.	Aletta WEF	EA Amendment Motivation Report
27839915547	MTN	EXPIRED	6/4/2019 2:19:00 PM	6/4/2019 2:19:26 PM	6/4/2019 8:07:19 PM	Konsep Omgewingsautoriseringsverslag aan die Departement van Omgewingsake vir Aletta Windplaas naby Copperton op 03 Junie 2019. Inligting Stephan 0117980600.	Aletta WEF	EA Amendment Motivation Report
27786519760	CELL C	DELIVRD	6/4/2019 2:19:00 PM	6/4/2019 2:19:26 PM	6/4/2019 2:19:32 PM	Konsep Omgewingsautoriseringsverslag aan die Departement van Omgewingsake vir Aletta Windplaas naby Copperton op 03 Junie 2019. Inligting Stephan 0117980600.	Aletta WEF	EA Amendment Motivation Report
27732996774	MTN	EXPIRED	6/4/2019 2:19:00 PM	6/4/2019 2:19:26 PM	6/4/2019 8:07:19 PM	Konsep Omgewingsautoriseringsverslag aan die Departement van Omgewingsake vir Aletta Windplaas naby Copperton op 03 Junie 2019. Inligting Stephan 0117980600.	Aletta WEF	EA Amendment Motivation Report
27630217262	MTN	UNDELIV	6/4/2019 2:19:00 PM	6/4/2019 2:19:26 PM	6/4/2019 2:49:32 PM	Konsep Omgewingsautoriseringsverslag aan die Departement van Omgewingsake vir Aletta Windplaas naby Copperton op 03 Junie 2019. Inligting Stephan 0117980600.	Aletta WEF	EA Amendment Motivation Report
27786770790	MTN	EXPIRED	6/4/2019 2:19:00 PM	6/4/2019 2:19:26 PM	6/4/2019 7:28:57 PM	Konsep Omgewingsautoriseringsverslag aan die Departement van Omgewingsake vir Aletta Windplaas naby Copperton op 03 Junie 2019. Inligting Stephan 0117980600.	Aletta WEF	EA Amendment Motivation Report
27840517744	CELL C	UNDELIV	6/4/2019 2:19:00 PM	6/4/2019 2:19:26 PM	6/4/2019 2:49:40 PM	Konsep Omgewingsautoriseringsverslag aan die Departement van Omgewingsake vir Aletta Windplaas naby Copperton op 03 Junie 2019. Inligting Stephan 0117980600.	Aletta WEF	EA Amendment Motivation Report
27630642469	MTN	DELIVRD	6/4/2019 2:19:00 PM	6/4/2019 2:19:26 PM	6/4/2019 2:19:32 PM	Konsep Omgewingsautoriseringsverslag aan die Departement van Omgewingsake vir Aletta Windplaas naby Copperton op 03 Junie 2019. Inligting Stephan 0117980600.	Aletta WEF	EA Amendment Motivation Report
27733083538	MTN	EXPIRED	6/4/2019 2:19:00 PM	6/4/2019 2:19:26 PM	6/4/2019 8:07:19 PM	Konsep Omgewingsautoriseringsverslag aan die Departement van Omgewingsake vir Aletta Windplaas naby Copperton op 03 Junie 2019. Inligting Stephan 0117980600.	Aletta WEF	EA Amendment Motivation Report

27786770990	MTN	UNDELIV	6/4/2019 2:19:00 PM	6/4/2019 2:19:26 PM	6/4/2019 2:49:32 PM	Konsep Omgewingsautoriseringsverslag aan die Departement van Omgewingsake vir Aletta Windplaas naby Copperton op 03 Junie 2019. Inligting Stephan 0117980600.	Aletta WEF	EA Amendment Motivation Report
27840832273	CELL C	UNDELIV	6/4/2019 2:19:00 PM	6/4/2019 2:19:26 PM	6/4/2019 2:49:35 PM	Konsep Omgewingsautoriseringsverslag aan die Departement van Omgewingsake vir Aletta Windplaas naby Copperton op 03 Junie 2019. Inligting Stephan 0117980600.	Aletta WEF	EA Amendment Motivation Report
27630992373	CELL C	UNDELIV	6/4/2019 2:19:00 PM	6/4/2019 2:19:26 PM	6/4/2019 2:49:40 PM	Konsep Omgewingsautoriseringsverslag aan die Departement van Omgewingsake vir Aletta Windplaas naby Copperton op 03 Junie 2019. Inligting Stephan 0117980600.	Aletta WEF	EA Amendment Motivation Report
27733312277	CELL C	UNDELIV	6/4/2019 2:19:00 PM	6/4/2019 2:19:26 PM	6/4/2019 2:49:35 PM	Konsep Omgewingsautoriseringsverslag aan die Departement van Omgewingsake vir Aletta Windplaas naby Copperton op 03 Junie 2019. Inligting Stephan 0117980600.	Aletta WEF	EA Amendment Motivation Report
27631255909	MTN	DELIVRD	6/4/2019 2:19:00 PM	6/4/2019 2:19:26 PM	6/4/2019 2:19:28 PM	Konsep Omgewingsautoriseringsverslag aan die Departement van Omgewingsake vir Aletta Windplaas naby Copperton op 03 Junie 2019. Inligting Stephan 0117980600.	Aletta WEF	EA Amendment Motivation Report
27787024176	MTN	UNDELIV	6/4/2019 2:19:00 PM	6/4/2019 2:19:26 PM	6/4/2019 2:49:32 PM	Konsep Omgewingsautoriseringsverslag aan die Departement van Omgewingsake vir Aletta Windplaas naby Copperton op 03 Junie 2019. Inligting Stephan 0117980600.	Aletta WEF	EA Amendment Motivation Report
27733675790	MTN	DELIVRD	6/4/2019 2:19:00 PM	6/4/2019 2:19:26 PM	6/4/2019 2:24:54 PM	Konsep Omgewingsautoriseringsverslag aan die Departement van Omgewingsake vir Aletta Windplaas naby Copperton op 03 Junie 2019. Inligting Stephan 0117980600.	Aletta WEF	EA Amendment Motivation Report
27842535036	CELL C	EXPIRED	6/4/2019 2:19:00 PM	6/4/2019 2:19:26 PM	6/4/2019 8:07:19 PM	Konsep Omgewingsautoriseringsverslag aan die Departement van Omgewingsake vir Aletta Windplaas naby Copperton op 03 Junie 2019. Inligting Stephan 0117980600.	Aletta WEF	EA Amendment Motivation Report
27787409156	MTN	EXPIRED	6/4/2019 2:19:00 PM	6/4/2019 2:19:26 PM	6/4/2019 8:07:19 PM	Konsep Omgewingsautoriseringsverslag aan die Departement van Omgewingsake vir Aletta Windplaas naby Copperton op 03 Junie 2019. Inligting Stephan 0117980600.	Aletta WEF	EA Amendment Motivation Report
27631657606	MTN	DELIVRD	6/4/2019 2:19:00 PM	6/4/2019 2:19:26 PM	6/4/2019 2:19:30 PM	Konsep Omgewingsautoriseringsverslag aan die Departement van Omgewingsake vir Aletta Windplaas naby Copperton op 03 Junie 2019. Inligting Stephan 0117980600.	Aletta WEF	EA Amendment Motivation Report
27735854155	MTN	DELIVRD	6/4/2019 2:19:00 PM	6/4/2019 2:19:26 PM	6/4/2019 2:19:29 PM	Konsep Omgewingsautoriseringsverslag aan die Departement van Omgewingsake vir Aletta Windplaas naby Copperton op 03 Junie 2019. Inligting Stephan 0117980600.	Aletta WEF	EA Amendment Motivation Report

27787658161	MTN	EXPIRED	6/4/2019 2:19:00 PM	6/4/2019 2:19:26 PM	6/4/2019 8:07:19 PM	Konsep Omgewingsautoriseringsverslag aan die Departement van Omgewingsake vir Aletta Windplaas naby Copperton op 03 Junie 2019. Inligting Stephan 0117980600.	Aletta WEF	EA Amendment Motivation Report
27842692790	CELL C	DELIVRD	6/4/2019 2:19:00 PM	6/4/2019 2:19:26 PM	6/4/2019 2:19:32 PM	Konsep Omgewingsautoriseringsverslag aan die Departement van Omgewingsake vir Aletta Windplaas naby Copperton op 03 Junie 2019. Inligting Stephan 0117980600.	Aletta WEF	EA Amendment Motivation Report
27631659221	MTN	DELIVRD	6/4/2019 2:19:00 PM	6/4/2019 2:19:26 PM	6/4/2019 2:19:32 PM	Konsep Omgewingsautoriseringsverslag aan die Departement van Omgewingsake vir Aletta Windplaas naby Copperton op 03 Junie 2019. Inligting Stephan 0117980600.	Aletta WEF	EA Amendment Motivation Report
27736169821	MTN	DELIVRD	6/4/2019 2:19:00 PM	6/4/2019 2:19:26 PM	6/4/2019 2:19:34 PM	Konsep Omgewingsautoriseringsverslag aan die Departement van Omgewingsake vir Aletta Windplaas naby Copperton op 03 Junie 2019. Inligting Stephan 0117980600.	Aletta WEF	EA Amendment Motivation Report
27843601806	CELL C	EXPIRED	6/4/2019 2:19:00 PM	6/4/2019 2:19:26 PM	6/4/2019 8:07:19 PM	Konsep Omgewingsautoriseringsverslag aan die Departement van Omgewingsake vir Aletta Windplaas naby Copperton op 03 Junie 2019. Inligting Stephan 0117980600.	Aletta WEF	EA Amendment Motivation Report
27787804636	MTN	EXPIRED	6/4/2019 2:19:00 PM	6/4/2019 2:19:26 PM	6/4/2019 8:07:19 PM	Konsep Omgewingsautoriseringsverslag aan die Departement van Omgewingsake vir Aletta Windplaas naby Copperton op 03 Junie 2019. Inligting Stephan 0117980600.	Aletta WEF	EA Amendment Motivation Report
27632840761	MTN	EXPIRED	6/4/2019 2:19:00 PM	6/4/2019 2:19:26 PM	6/4/2019 8:07:19 PM	Konsep Omgewingsautoriseringsverslag aan die Departement van Omgewingsake vir Aletta Windplaas naby Copperton op 03 Junie 2019. Inligting Stephan 0117980600.	Aletta WEF	EA Amendment Motivation Report
27736611277	Telkom Mobile	EXPIRED	6/4/2019 2:19:00 PM	6/4/2019 2:19:26 PM	6/4/2019 7:19:48 PM	Konsep Omgewingsautoriseringsverslag aan die Departement van Omgewingsake vir Aletta Windplaas naby Copperton op 03 Junie 2019. Inligting Stephan 0117980600.	Aletta WEF	EA Amendment Motivation Report
27787820588	MTN	DELIVRD	6/4/2019 2:19:00 PM	6/4/2019 2:19:26 PM	6/4/2019 2:19:28 PM	Konsep Omgewingsautoriseringsverslag aan die Departement van Omgewingsake vir Aletta Windplaas naby Copperton op 03 Junie 2019. Inligting Stephan 0117980600.	Aletta WEF	EA Amendment Motivation Report
27844632980	CELL C	EXPIRED	6/4/2019 2:19:00 PM	6/4/2019 2:19:26 PM	6/4/2019 8:07:19 PM	Konsep Omgewingsautoriseringsverslag aan die Departement van Omgewingsake vir Aletta Windplaas naby Copperton op 03 Junie 2019. Inligting Stephan 0117980600.	Aletta WEF	EA Amendment Motivation Report
27788169418	MTN	EXPIRED	6/4/2019 2:19:00 PM	6/4/2019 2:19:26 PM	6/4/2019 8:07:19 PM	Konsep Omgewingsautoriseringsverslag aan die Departement van Omgewingsake vir Aletta Windplaas naby Copperton op 03 Junie 2019. Inligting Stephan 0117980600.	Aletta WEF	EA Amendment Motivation Report
27632872747	MTN	DELIVRD	6/4/2019 2:19:00 PM	6/4/2019 2:19:26 PM	6/4/2019 2:19:37 PM	Konsep Omgewingsautoriseringsverslag aan die Departement van Omgewingsake vir Aletta Windplaas naby Copperton op 03 Junie 2019. Inligting Stephan 0117980600.	Aletta WEF	EA Amendment Motivation Report

27844717485	CELL C	EXPIRED	6/4/2019 2:19:00 PM	6/4/2019 2:19:26 PM	6/4/2019 8:07:19 PM	Konsep Omgewingsautoriseringsverslag aan die Departement van Omgewingsake vir Aletta Windplaas naby Copperton op 03 Junie 2019. Inligting Stephan 0117980600.	Aletta WEF	EA Amendment Motivation Report
27737782246	MTN	UNDELIV	6/4/2019 2:19:00 PM	6/4/2019 2:19:26 PM	6/4/2019 2:49:32 PM	Konsep Omgewingsautoriseringsverslag aan die Departement van Omgewingsake vir Aletta Windplaas naby Copperton op 03 Junie 2019. Inligting Stephan 0117980600.	Aletta WEF	EA Amendment Motivation Report
27633157841	MTN	EXPIRED	6/4/2019 2:19:00 PM	6/4/2019 2:19:26 PM	6/4/2019 8:07:19 PM	Konsep Omgewingsautoriseringsverslag aan die Departement van Omgewingsake vir Aletta Windplaas naby Copperton op 03 Junie 2019. Inligting Stephan 0117980600.	Aletta WEF	EA Amendment Motivation Report
27789423122	MTN	DELIVRD	6/4/2019 2:19:00 PM	6/4/2019 2:19:26 PM	6/4/2019 2:19:29 PM	Konsep Omgewingsautoriseringsverslag aan die Departement van Omgewingsake vir Aletta Windplaas naby Copperton op 03 Junie 2019. Inligting Stephan 0117980600.	Aletta WEF	EA Amendment Motivation Report
27738567080	MTN	EXPIRED	6/4/2019 2:19:00 PM	6/4/2019 2:19:26 PM	6/4/2019 8:07:19 PM	Konsep Omgewingsautoriseringsverslag aan die Departement van Omgewingsake vir Aletta Windplaas naby Copperton op 03 Junie 2019. Inligting Stephan 0117980600.	Aletta WEF	EA Amendment Motivation Report
27789432676	MTN	UNDELIV	6/4/2019 2:19:00 PM	6/4/2019 2:19:26 PM	6/4/2019 2:49:32 PM	Konsep Omgewingsautoriseringsverslag aan die Departement van Omgewingsake vir Aletta Windplaas naby Copperton op 03 Junie 2019. Inligting Stephan 0117980600.	Aletta WEF	EA Amendment Motivation Report
27633766031	MTN	DELIVRD	6/4/2019 2:19:00 PM	6/4/2019 2:19:26 PM	6/4/2019 2:19:28 PM	Konsep Omgewingsautoriseringsverslag aan die Departement van Omgewingsake vir Aletta Windplaas naby Copperton op 03 Junie 2019. Inligting Stephan 0117980600.	Aletta WEF	EA Amendment Motivation Report
27738645297	MTN	EXPIRED	6/4/2019 2:19:00 PM	6/4/2019 2:19:26 PM	6/4/2019 8:07:19 PM	Konsep Omgewingsautoriseringsverslag aan die Departement van Omgewingsake vir Aletta Windplaas naby Copperton op 03 Junie 2019. Inligting Stephan 0117980600.	Aletta WEF	EA Amendment Motivation Report
27790127660	Vodacom	DELIVRD	6/4/2019 2:19:00 PM	6/4/2019 2:19:26 PM	6/4/2019 2:19:28 PM	Konsep Omgewingsautoriseringsverslag aan die Departement van Omgewingsake vir Aletta Windplaas naby Copperton op 03 Junie 2019. Inligting Stephan 0117980600.	Aletta WEF	EA Amendment Motivation Report
27634214668	MTN	EXPIRED	6/4/2019 2:19:00 PM	6/4/2019 2:19:26 PM	6/4/2019 8:07:19 PM	Konsep Omgewingsautoriseringsverslag aan die Departement van Omgewingsake vir Aletta Windplaas naby Copperton op 03 Junie 2019. Inligting Stephan 0117980600.	Aletta WEF	EA Amendment Motivation Report
27738879817	MTN	DELIVRD	6/4/2019 2:19:00 PM	6/4/2019 2:19:26 PM	6/4/2019 2:19:27 PM	Konsep Omgewingsautoriseringsverslag aan die Departement van Omgewingsake vir Aletta Windplaas naby Copperton op 03 Junie 2019. Inligting Stephan 0117980600.	Aletta WEF	EA Amendment Motivation Report
27790393540	Vodacom	EXPIRED	6/4/2019 2:19:00 PM	6/4/2019 2:19:26 PM	6/4/2019 8:07:19 PM	Konsep Omgewingsautoriseringsverslag aan die Departement van Omgewingsake vir Aletta Windplaas naby Copperton op 03 Junie 2019. Inligting Stephan 0117980600.	Aletta WEF	EA Amendment Motivation Report

27738981183	MTN	EXPIRED	6/4/2019 2:19:00 PM	6/4/2019 2:19:26 PM	6/4/2019 8:07:19 PM	Konsep Omgewingsautoriseringsverslag aan die Departement van Omgewingsake vir Aletta Windplaas naby Copperton op 03 Junie 2019. Inligting Stephan 0117980600.	Aletta WEF	EA Amendment Motivation Report
27634393387	CELL C	EXPIRED	6/4/2019 2:19:00 PM	6/4/2019 2:19:26 PM	6/4/2019 8:07:19 PM	Konsep Omgewingsautoriseringsverslag aan die Departement van Omgewingsake vir Aletta Windplaas naby Copperton op 03 Junie 2019. Inligting Stephan 0117980600.	Aletta WEF	EA Amendment Motivation Report
27790511870	Vodacom	DELIVRD	6/4/2019 2:19:00 PM	6/4/2019 2:19:26 PM	6/4/2019 2:19:32 PM	Konsep Omgewingsautoriseringsverslag aan die Departement van Omgewingsake vir Aletta Windplaas naby Copperton op 03 Junie 2019. Inligting Stephan 0117980600.	Aletta WEF	EA Amendment Motivation Report
27738981667	MTN	DELIVRD	6/4/2019 2:19:00 PM	6/4/2019 2:19:26 PM	6/4/2019 2:24:30 PM	Konsep Omgewingsautoriseringsverslag aan die Departement van Omgewingsake vir Aletta Windplaas naby Copperton op 03 Junie 2019. Inligting Stephan 0117980600.	Aletta WEF	EA Amendment Motivation Report
27634841716	MTN	UNDELIV	6/4/2019 2:19:00 PM	6/4/2019 2:19:26 PM	6/4/2019 2:49:32 PM	Konsep Omgewingsautoriseringsverslag aan die Departement van Omgewingsake vir Aletta Windplaas naby Copperton op 03 Junie 2019. Inligting Stephan 0117980600.	Aletta WEF	EA Amendment Motivation Report
27739811848	MTN	DELIVRD	6/4/2019 2:19:00 PM	6/4/2019 2:19:26 PM	6/4/2019 2:19:32 PM	Konsep Omgewingsautoriseringsverslag aan die Departement van Omgewingsake vir Aletta Windplaas naby Copperton op 03 Junie 2019. Inligting Stephan 0117980600.	Aletta WEF	EA Amendment Motivation Report
27790564159	Vodacom	DELIVRD	6/4/2019 2:19:00 PM	6/4/2019 2:19:26 PM	6/4/2019 2:19:32 PM	Konsep Omgewingsautoriseringsverslag aan die Departement van Omgewingsake vir Aletta Windplaas naby Copperton op 03 Junie 2019. Inligting Stephan 0117980600.	Aletta WEF	EA Amendment Motivation Report
27638395032	MTN	DELIVRD	6/4/2019 2:19:00 PM	6/4/2019 2:19:26 PM	6/4/2019 2:19:32 PM	Konsep Omgewingsautoriseringsverslag aan die Departement van Omgewingsake vir Aletta Windplaas naby Copperton op 03 Junie 2019. Inligting Stephan 0117980600.	Aletta WEF	EA Amendment Motivation Report
27739936223	MTN	DELIVRD	6/4/2019 2:19:00 PM	6/4/2019 2:19:26 PM	6/4/2019 2:19:30 PM	Konsep Omgewingsautoriseringsverslag aan die Departement van Omgewingsake vir Aletta Windplaas naby Copperton op 03 Junie 2019. Inligting Stephan 0117980600.	Aletta WEF	EA Amendment Motivation Report
27845477647	CELL C	UNDELIV	6/4/2019 2:19:00 PM	6/4/2019 2:19:26 PM	6/4/2019 2:49:41 PM	Konsep Omgewingsautoriseringsverslag aan die Departement van Omgewingsake vir Aletta Windplaas naby Copperton op 03 Junie 2019. Inligting Stephan 0117980600.	Aletta WEF	EA Amendment Motivation Report
27638986718	MTN	EXPIRED	6/4/2019 2:19:00 PM	6/4/2019 2:19:26 PM	6/4/2019 8:07:19 PM	Konsep Omgewingsautoriseringsverslag aan die Departement van Omgewingsake vir Aletta Windplaas naby Copperton op 03 Junie 2019. Inligting Stephan 0117980600.	Aletta WEF	EA Amendment Motivation Report
27740205975	CELL C	UNDELIV	6/4/2019 2:19:00 PM	6/4/2019 2:19:26 PM	6/4/2019 2:49:35 PM	Konsep Omgewingsautoriseringsverslag aan die Departement van Omgewingsake vir Aletta Windplaas naby Copperton op 03 Junie 2019. Inligting Stephan 0117980600.	Aletta WEF	EA Amendment Motivation Report

27846071836	CELL C	DELIVRD	6/4/2019 2:19:00 PM	6/4/2019 2:19:26 PM	6/4/2019 2:19:27 PM	Konsep Omgewingsautoriseringsverslag aan die Departement van Omgewingsake vir Aletta Windplaas naby Copperton op 03 Junie 2019. Inligting Stephan 0117980600.	Aletta WEF	EA Amendment Motivation Report
27642257321	CELL C	UNDELIV	6/4/2019 2:19:00 PM	6/4/2019 2:19:26 PM	6/4/2019 2:49:40 PM	Konsep Omgewingsautoriseringsverslag aan die Departement van Omgewingsake vir Aletta Windplaas naby Copperton op 03 Junie 2019. Inligting Stephan 0117980600.	Aletta WEF	EA Amendment Motivation Report
27740713587	CELL C	EXPIRED	6/4/2019 2:19:00 PM	6/4/2019 2:19:26 PM	6/4/2019 8:07:19 PM	Konsep Omgewingsautoriseringsverslag aan die Departement van Omgewingsake vir Aletta Windplaas naby Copperton op 03 Junie 2019. Inligting Stephan 0117980600.	Aletta WEF	EA Amendment Motivation Report
27847012412	CELL C	DELIVRD	6/4/2019 2:19:00 PM	6/4/2019 2:19:26 PM	6/4/2019 2:19:33 PM	Konsep Omgewingsautoriseringsverslag aan die Departement van Omgewingsake vir Aletta Windplaas naby Copperton op 03 Junie 2019. Inligting Stephan 0117980600.	Aletta WEF	EA Amendment Motivation Report
27643413234	CELL C	DELIVRD	6/4/2019 2:19:00 PM	6/4/2019 2:19:26 PM	6/4/2019 2:19:33 PM	Konsep Omgewingsautoriseringsverslag aan die Departement van Omgewingsake vir Aletta Windplaas naby Copperton op 03 Junie 2019. Inligting Stephan 0117980600.	Aletta WEF	EA Amendment Motivation Report
27742375435	CELL C	DELIVRD	6/4/2019 2:19:00 PM	6/4/2019 2:19:26 PM	6/4/2019 2:19:32 PM	Konsep Omgewingsautoriseringsverslag aan die Departement van Omgewingsake vir Aletta Windplaas naby Copperton op 03 Junie 2019. Inligting Stephan 0117980600.	Aletta WEF	EA Amendment Motivation Report
27847249720	CELL C	EXPIRED	6/4/2019 2:19:00 PM	6/4/2019 2:19:26 PM	6/4/2019 8:07:19 PM	Konsep Omgewingsautoriseringsverslag aan die Departement van Omgewingsake vir Aletta Windplaas naby Copperton op 03 Junie 2019. Inligting Stephan 0117980600.	Aletta WEF	EA Amendment Motivation Report
27710907595	CELL C	DELIVRD	6/4/2019 2:19:00 PM	6/4/2019 2:19:26 PM	6/4/2019 2:19:27 PM	Konsep Omgewingsautoriseringsverslag aan die Departement van Omgewingsake vir Aletta Windplaas naby Copperton op 03 Junie 2019. Inligting Stephan 0117980600.	Aletta WEF	EA Amendment Motivation Report
27743150397	CELL C	DELIVRD	6/4/2019 2:19:00 PM	6/4/2019 2:19:26 PM	6/4/2019 2:19:27 PM	Konsep Omgewingsautoriseringsverslag aan die Departement van Omgewingsake vir Aletta Windplaas naby Copperton op 03 Junie 2019. Inligting Stephan 0117980600.	Aletta WEF	EA Amendment Motivation Report
27847486465	CELL C	EXPIRED	6/4/2019 2:19:00 PM	6/4/2019 2:19:26 PM	6/4/2019 8:07:19 PM	Konsep Omgewingsautoriseringsverslag aan die Departement van Omgewingsake vir Aletta Windplaas naby Copperton op 03 Junie 2019. Inligting Stephan 0117980600.	Aletta WEF	EA Amendment Motivation Report
27712547827	Vodacom	EXPIRED	6/4/2019 2:19:00 PM	6/4/2019 2:19:26 PM	6/4/2019 8:07:19 PM	Konsep Omgewingsautoriseringsverslag aan die Departement van Omgewingsake vir Aletta Windplaas naby Copperton op 03 Junie 2019. Inligting Stephan 0117980600.	Aletta WEF	EA Amendment Motivation Report
27745831341	CELL C	DELIVRD	6/4/2019 2:19:00 PM	6/4/2019 2:19:26 PM	6/4/2019 3:56:28 PM	Konsep Omgewingsautoriseringsverslag aan die Departement van Omgewingsake vir Aletta Windplaas naby Copperton op 03 Junie 2019. Inligting Stephan 0117980600.	Aletta WEF	EA Amendment Motivation Report

27847999489	CELL C	UNDELIV	6/4/2019 2:19:00 PM	6/4/2019 2:19:26 PM	6/4/2019 2:49:40 PM	Konsep Omgewingsautoriseringsverslag aan die Departement van Omgewingsake vir Aletta Windplaas naby Copperton op 03 Junie 2019. Inligting Stephan 0117980600.	Aletta WEF	EA Amendment Motivation Report
27712697114	MTN	DELIVRD	6/4/2019 2:19:00 PM	6/4/2019 2:19:26 PM	6/4/2019 2:19:27 PM	Konsep Omgewingsautoriseringsverslag aan die Departement van Omgewingsake vir Aletta Windplaas naby Copperton op 03 Junie 2019. Inligting Stephan 0117980600.	Aletta WEF	EA Amendment Motivation Report
27746082390	CELL C	DELIVRD	6/4/2019 2:19:00 PM	6/4/2019 2:19:26 PM	6/4/2019 2:19:29 PM	Konsep Omgewingsautoriseringsverslag aan die Departement van Omgewingsake vir Aletta Windplaas naby Copperton op 03 Junie 2019. Inligting Stephan 0117980600.	Aletta WEF	EA Amendment Motivation Report
27714884010	Vodacom	DELIVRD	6/4/2019 2:19:00 PM	6/4/2019 2:19:26 PM	6/4/2019 2:19:39 PM	Konsep Omgewingsautoriseringsverslag aan die Departement van Omgewingsake vir Aletta Windplaas naby Copperton op 03 Junie 2019. Inligting Stephan 0117980600.	Aletta WEF	EA Amendment Motivation Report
27746138638	CELL C	UNDELIV	6/4/2019 2:19:00 PM	6/4/2019 2:19:26 PM	6/4/2019 2:49:41 PM	Konsep Omgewingsautoriseringsverslag aan die Departement van Omgewingsake vir Aletta Windplaas naby Copperton op 03 Junie 2019. Inligting Stephan 0117980600.	Aletta WEF	EA Amendment Motivation Report
27717378974	MTN	EXPIRED	6/4/2019 2:19:00 PM	6/4/2019 2:19:26 PM	6/4/2019 8:07:19 PM	Konsep Omgewingsautoriseringsverslag aan die Departement van Omgewingsake vir Aletta Windplaas naby Copperton op 03 Junie 2019. Inligting Stephan 0117980600.	Aletta WEF	EA Amendment Motivation Report
27747447466	CELL C	DELIVRD	6/4/2019 2:19:00 PM	6/4/2019 2:19:26 PM	6/4/2019 2:19:32 PM	Konsep Omgewingsautoriseringsverslag aan die Departement van Omgewingsake vir Aletta Windplaas naby Copperton op 03 Junie 2019. Inligting Stephan 0117980600.	Aletta WEF	EA Amendment Motivation Report
27747737098	CELL C	EXPIRED	6/4/2019 2:19:00 PM	6/4/2019 2:19:26 PM	6/4/2019 8:07:19 PM	Konsep Omgewingsautoriseringsverslag aan die Departement van Omgewingsake vir Aletta Windplaas naby Copperton op 03 Junie 2019. Inligting Stephan 0117980600.	Aletta WEF	EA Amendment Motivation Report

Stephan Jacobs

From: sivest_PPP

Sent: Wednesday, 03 July 2019 3:10 PM

To: Andrea Gibb; Stephan Jacobs; Hlengiwe Ntuli; 'Sandhisha Narain'

Cc: 'Henning Myburg'; 'Simphiwe Masilela'; 'Johanna Morobane'; 'Samantha Ralston-Paton'; 'Mashudu Marubini'; 'Jacoline Mans'; 'Mmatlala Rabothata'; 'Seoka Lekota';

'Ntsundeni Ravhogoni'; 'Patrick Lenyibi'; 'Moses Mahunonyane'; 'Lerato

Mokhoantle'; 'Brian Fisher'; 'Sonwabile Nkondeshe'; 'John Geeringh'; 'Lourens Leeuwner'; 'Alexander Cloete'; 'Jaco Roelofse'; 'Thulani Mthombeni'; 'Sonwabile Nkondeshe'; 'Lizell Stroh'; 'Nicole Abrahams'; 'Johan Koegelenberg'; 'Olwethu Tshekela'; 'Jakob Basson'; 'Natasha Higgitt'; 'Selaelo Matlhane'; 'Adriaan Tiplady';

'Ihlaam Peters'; 'Candice Spammer'; 'Sam Fiff'; 'Morgan Griffiths'

Subject: RE: Aletta WEF Amendment: Draft EA Amendment Motivation Report Comment

Period Starting

Importance: High

Dear Stakeholder,

APPLICATION TO AMEND AN ENVIRONMENTAL AUTHORISATION FOR THE PROPOSED DEVELOPMENT OF THE ALETTA 140MW WIND ENERGY FACILITY (WEF) NEAR COPPERTON, NORTHERN CAPE PROVINCE

Please note that the Draft EA Amendment Motivation Report for the above mentioned project was made available for public comment and review from **Monday 3 June 2019 to Friday 5 July 2019** (end of business day). The Draft EA Amendment Motivation Report comment and review period for the above-mentioned project therefore ends on **Friday 05 July 2019** (end of business day).

Should you have any comments, please feel free to contact the public participation office at the details below:

SiVEST Environmental

P.O. Box 2921, RIVONIA, 2128

Phone: (011) 798 0600

Email: <u>hlengiwen@sivest.co.za</u> / <u>sivest_ppp@sivest.co.za</u>

Fax: (011) 803 7272

Kind Regards

Andrea Gibb

Divisional Manager

SiVEST Environmental Division





SiVEST is a Level 3 BBBEE Contributor

D +27 11 798 0638 | T +27 11 798 0600 | E andreag@sivest.co.za | W www.sivest.co.za

Engineering Consulting | Project Management | Environmental Consulting | Town & Regional Planning | Management Systems Consulting

Durban | Johannesburg | Pretoria | Pietermaritzburg | Richards Bay | Port Louis (Mauritius)

From: sivest PPP

Sent: 03 June 2019 03:18 PM

To: Andrea Gibb <AndreaG@sivest.co.za>; Stephan Jacobs <StephanJ@sivest.co.za>; Hlengiwe Ntuli

<HlengiweN@sivest.co.za>; 'Sandhisha Narain' <snarain@biothermenergy.com>

Cc: 'Henning Myburg' <henning@agrink.co.za>; 'Simphiwe Masilela' <ObstacleEvaluators@atns.co.za>; 'Johanna Morobane' <JohannaM@atns.co.za>; 'Samantha Ralston-Paton' <energy@birdlife.org.za>; 'Mashudu Marubini' <MashuduMa@daff.gov.za>; 'Jacoline Mans' <jacolinema@daff.gov.za>; 'Mmatlala Rabothata' <mrabothata@environment.gov.za>; 'Seoka Lekota' <slekota@environment.gov.za>; 'Ntsundeni Ravhogoni' <Ntsundeni.Ravhogoni@dmr.gov.za>; 'Patrick Lenyibi' <ple>>plenyibi@ncpg.gov.za>; 'Moses Mahunonyane'
<MahunonyaneM@dws.gov.za>; 'Lerato Mokhoantle' <Mokhoantlel@dws.gov.za>; 'Brian Fisher'

<cerinJH@eskom.co.za>; 'Lourens Leeuwner' <lourensl@ewt.org.za>; 'Alexander Cloete'
<alexander@hantam.co.za>; 'Jaco Roelofse' <roelofse.j@vodamail.co.za>; 'Thulani Mthombeni'
<TMthombeni@ncpg.gov.za>; 'Sonwabile Nkondeshe' <snkondeshe@environment.gov.za>; 'Lizell Stroh'
<Obstacles@caa.co.za>; 'Nicole Abrahams' <AbrahamsN@nra.co.za>; 'Johan Koegelenberg'
<KoegelenbergJ@sentech.co.za>; 'Olwethu Tshekela' <tshekelaolwethu@gmail.com>; 'Jakob Basson'
<jakob@siyathemba.gov.za>; 'Natasha Higgitt' <nhiggitt@sahra.org.za>; 'Selaelo Matlhane' <smatlhane@ska.ac.za>; 'Adriaan Tiplady' <atiplady@ska.ac.za>; 'Ihlaam Peters' <ihlaamp@telkom.co.za>; 'Candice Spammer'
<spammec1@telkom.co.za>; 'Sam Fiff' <Francis.Rahlapane@transnet.net>; 'Morgan Griffiths'

Subject: Aletta WEF Amendment: Draft EA Amendment Motivation Report Comment Period Starting

Dear Stakeholder,

<morgan.griffiths@wessa.co.za>

APPLICATION TO AMEND AN ENVIRONMNETAL AUTHORISATION FOR THE PROPOSED DEVELOPMENT OF THE ALETTA 140MW WIND ENERGY FACILITY (WEF) NEAR COPPERTON, NORTHERN CAPE PROVINCE DEA Ref. No.:14/12/16/3/3/2/945/AM1

Please note that SiVEST SA (Pty) Ltd has been appointed by BioTherm Energy (Pty) Ltd (hereafter referred to as BioTherm) as the independent Environmental Assessment Practitioner (EAP) for the abovementioned project to apply for an Amendment of the Environmental Authorisation (EA) (Reference: 14/12/16/3/3/2/945/AM1).

BioTherm was issued with an EA for the proposed development of the 140MW Aletta Wind Energy Facility (WEF) and its associated infrastructure near Copperton in the Northern Cape Province on 9 May 2017 (DEA Reference 14/12/16/3/3/2/945).

The amendment to the EA is required to increase the authorised turbine dimensions to have a hub height of 120m, a rotor diameter of 140m and a generation output of 3.465MW each. The proposed turbine dimensions are within the specifications assessed during the EIA process. The application for an amendment of the EA was received by the Department of Environmental Affairs (DEA) on 11 April 2019. Following a review of the application for an amendment of the EA, the DEA concluded that the application falls within the ambit of amendments applied for in terms of Part 2 of Chapter 5 of the EIA Regulations, 2014 (as amended) and therefore a report needs to be made available to all interested and affected parties (I&APs) and relevant organs of state.

We would like to take this opportunity to inform you that, in accordance with the National Environmental Management Act, 1998 (Act No. 107 of 1998) (NEMA) (as amended) and the Environmental Impact Assessment (EIA) Regulations, 2014 (as amended), the Draft EA Amendment Motivation Report will be available for public review as from **Monday 3 June 2019 to Friday 5 July 2019** (end of business day).

The Draft EA Amendment Motivation Report as well as the accompanying appendices are available on SiVEST's website (http://www.sivest.co.za/, click on Downloads, then browse to the folder '15499 Aletta WEF Amendment'), and an electronic copy (on CD) has been sent to you. We kindly request that you submit your comments to the Public Participation Office at the below details, on or before Friday the 5th of July 2019 (before end of business day). SiVEST will forward any comments received after the public comment and review period directly to the relevant case officer at the Department of Environmental Affairs (DEA).

Stephan Jacobs or Hlengiwe Ntuli

PO BOX 2921, Rivonia, 2128 Tel – (011) 798 0600 Fax – (011) 803 7272 Email – sivest_ppp@sivest.co.za

We would like to thank you in anticipation of your active and meaningful contribution to the Amendment and Public Participation process.

Kind Regards

Andrea Gibb

Senior Manager

SiVEST Environmental Division

<< OLE Object: Picture (Device Independent Bitmap) >>

SiVEST is a Level 3 BBBEE Contributor

D +27 11 798 0638 | T +27 11 798 0600 | E andreag@sivest.co.za | W www.sivest.co.za

Engineering Consulting | Project Management | Environmental Consulting | Town & Regional Planning | Management Systems Consulting

Durban | Johannesburg | Pretoria | Pietermaritzburg | Richards Bay | Port Louis (Mauritius)



Appendix C2 PROOF OF ADVERTISEMENTS

Kalahari Wes Boerevereniging hou weer brandsiek blokbespuitings

UPINGTON: Skaap brandsiek blokbespuitings word vir die afgelope ses jaar toegedien en dit het tot groot sukses gelei.

Kalahari Wes Boerevereniging wil 'n beroep doen op die boere om weereens tydens Meimaand hul vee vir brandsiek te spuit.



Kalahari Wes Boerevereniging het weereens besluit om in hulle gebied 'n blokbespuiting te doen, waar alle boere hul kleinvee twee maal binne 10 dae met 'n geregistreerde brandsiek middel moet behandel.

Kalahari Wes nooi nou ander boereverenigings uit om deel te wees van die inisiatief om sodoende hul brandsiek bespuitings te sinchroniseer dat soveel as moontlik kleinvee in die bepaalde tyd behandel word. Hierdie projek word gesteun deur die Staats Veeartsenydiens, die NKRPO en ook deur verskeie diere gesondheidsmaatskappye.

Sommige maatskappye sal spuitstowwe teen afslagpryse beskikbaar stel. Vir die boere wat so gelukkig was met reën moet inwendige parasiete behandel word.

U kan dus net seker maak dat die produk wat u gaan gebruik vir inwendige parasiete sowel as vir brandsiek geskik



Dit is tot almal se voordeel. Vir meer inligting skakel die Kalahari Wes Boerevereniging se voorsitter Japie Steyn 0789583136

Besigheidsleiers besoek skool

Die besigheidsleiers wat deel is van Partners for Possibilities, het onlangs 'n graad 6 oueraand van Lukhanyiso Primêr bygewoon. Die skoolhoof, me Princess May en Elsa Jones, redakteur van die Gembok, is PfP vennote. Op die foto is Princess May saam met Freek Muller, Aletta Pretorius en Elsa Jones. Almal is deel van die Sirkel 1 Upington PfP groep. Die doel van PfP-lede se besoek aan die skool was om die hoof by te staan met die vergadering. Aletta het aan die ouers verduidelik waaroor PfP gaan, Freek het gepraat oor hoe ouers kinders moet bystaan en bemoedig en Elsa het genoem dat daar verskillende aksies beplan word om ouerbetrokkenheid by die skool aan te moedig.





'n Graad 6 oueraand is by Lukhanyiso Primêr gehou. Die doel van die aand was om ouers bewus te maak oor die vordering van die graad sesse, asook om ouers in te lig oor die probleme wat die skool met leerders ondervind. Die skoolhoof, me Princess May het die ouers, asook leerders wat die geleentheid bygewoon het, bedank vir hul opkoms.

Die skoolhoof, me Princess May aan die woord, terwyl me Pheliswa Poni (HOD) as tolk optree, sodat al die ouers kan verstaan wat gesê word. Me Poni het die PfP besoekers bedank vir die opbouende gesprekke wat die aand met die ouers gevoer is.



SIVEST Environmental Division

presents

Gospel Artist

With band



NOTIFICATION OF AN APPLICATION TO AMEND AN ENVIRONMENTAL AUTHORISATION

CONTACT | PS C FARMER | +27 64 651 5272

2 GRANAAT STREET, PROGRESS

PROPOSED DEVELOPMENT OF THE ALETTA 140MW WIND ENERGY FACILITY (WEF) AND ASSOCIATED INFRASTRUCTURE NEAR COPPERTON, NORTHERN CAPE PROVINCE

DEA Ref. No.:14/12/16/3/3/2/945/ AM1

PROJECT INFORMATION

In terms of the National Environmental Management Act, 1998 (Act No. 107 of 1998) (as amended) and the Environmental Impact Assessment (EIA) Regula-(NEMA) tions, 2014 (as amended) notice is hereby given that BioTherm Energy (Pty) Ltd (hereafter referred to as BioTherm) have appointed SiVEST SA (Pty) Ltd, as the independent Environmental Assessment Practitioner (EAP), to apply for an Amendment of the Environmental Authorisation (EA) for the above mentioned project.

BioTherm was issued with an EA for the proposed development of the 140MW Aletta Wind Energy Facility (WEF) and its associated infrastructure near Copperton in the Northern Cape Province on 9 May 2017 (DÉA Ref. No.: 14/12/16/3/3/2/945).

The amendment to the EA is required to increase the authorised turbine dimensions to have a hub height of 120m, a rotor diameter of 140m and a generation output of 3.465MW each. The proposed turbine dimensions are within the specifications assessed during the EIA process. The application for the amendment of the EA was received by the Department of Environmental Affairs (DEA) on 11 April 2019. Following a review of the application for an amendment for the EA, the DEA concluded that the application falls within the ambit of amendments applied for in terms of Part 2 of Chapter 5 of the EIA Regulations, 2014 (as amended) and therefore a report needs to be made available to all interested and affected parties (I&APs) and relevant organs of state.

PROJECT LOCATION

The proposed project is located within the Northern Cape Province. It fall within the Siyathemba Local Municipality of the Pixley ka Seme District Municipality. The proposed project is located approximately 20km east of Copperton. The WEF project includes the following farms:

- Portion 1 of Drielings Pan No.101
- Portion 2 of Drielings Pan No.101
- Portion 3 of Drielings Pan No.101
- Remainder of Drielings Pan No.101

AVAILABILITY OF THE DRAFT MOTIVATION AMENDMENT REPORT FOR REVIEW

The Daft Motivation Amendment Report for the WEF will be made available for public review as from Monday 03 June 2019 until Friday 05 July 2019 (end of business day) on the SiVEST website (http:// www.sivest.co.za/, click on Downloads, then browse to the folder '15499 Aletta WEF Amendment'. Should you wish to receive an electronic copy of the Draft Motivation Amendment Report (on CD) please forward your request in writing to the Consultants below.

To register as an I&AP and / or to obtain additional information please submit your name, contact details and the interest which you have in the application to SiVEST as per the details below:

STEPHAN JACOBS OR HLENGIWE NTULI

SiVEST Environmental P O Box 2921 **RIVONIA** 2128

Tel: (011) 798 0600 Fax: (011) 803 7272 E-mail:sivest_ppp@sivest.co.za Website: www.sivest.co.za

SIVEST **Environmental Division**



KENNISGEWING VAN 'N AANSOEK OM WYSIGING VAN 'N OMGEWINGSMAGTIGING

BEOOGDEONTWIKKELING VAN DIE ALETTA 140 MW WINDKRAGAANLEG (WEF) EN GEPAARDGAANDE INFRASTRUKTUUR NABY COPPERTON, NOORD KAAPPROVINSIE

DO verw. No.: 14/12/16/3/3/2/945/AM1

PROJEKINLIGTING

Ingevolge die Nasionale Wet op Omgewingsbestuur, 1998 (Wet 107 van 1998) (NEMA) (soos gewysig) en die Regulasies op Omgewingsimpakevaluerings (OIE-regulasies), 2014 (soos gewysig), geskied kennisgewing hiermee dat BioTherm Energy (Edms.) Bpk. (hierna BioTherm genoem) SiVEST SA (Edms.) Bpk. aangestel het as die onafhanklike Omgewingsevalueringspraktisyn (OEP) om aansoek te doen om 'n Wysiging van die Omgewingsmagtiging (OM) vir die bogenoemde projek.

Op 9 Mei 2017 is 'n OM aan BioTherm uitgereik vir die beoogde ontwikkeling van die 140 MW Aletta Windkragaanleg (WEF) en gepaardgaande infrastruktuur naby Copperton in die Noord-Kaapprovinsie (DO-verw. No.: 14/12/16/3/3/2/945).

Die wysiging van die OM word benodig om die goedgekeurde turbine-afmetings te vergroot om 'n naafhoogte van 120 m, 'n rotordeursnee van 140 m en 'n opwekkingsuitset van 3,465 MW elk te hê. Die beoogde turbine-afmetings val in die spesifikasies wat tydens die OIE-proses geëvalueer is. Die Departement van Omgewingsake (DO) het die aansoek om die wysiging van die OM op 11 April 2019 ontvang. Na 'n oorsig van die aansoek om wysiging vir die OM, het die DO tot die slotsom gekom dat die aansoek in die bestek van wysigings val waarvoor aansoek gedoen word ingevolge Deel 2 van Hoofstuk 5 van die OIE-regulasies, 2014 (soos gewysig) en derhalwe moet 'n verslag aan alle belang-stellende en geaffekteerde partye (B&GP's) en tersaaklike staatsinstansies beskikbaar gestel word.

PROJEKLIGGING

Die beoogde projek is in die Noord-Kaapprovinsie geleë. Dit val in die Siyathemba Plaaslike Munisipaliteit van die Pixley ka Seme Distrikmunisipaliteit. Die beoogde projek is sowat 20 km oos van Copperton geleë. Die WEF-projek sluit die volgende plase in:

- Gedeelte 1 van Drielings Pan No. 101;
- Gedeelte 2 van Drielings Pan No. 101;
- Gedeelte 3 van Drielings Pan No. 101; en die Restant van Drielings Pan No. 101.

BESKIKBAARHEID VAN DIE KONSEP MOTIVERINGSVERSLAG VIR WYSIGING VIR INSAE

Die Konsep Motiveringsverslag vir Wysiging vir die WEF sal vanaf Maandag 03 Junie 2019 tot Vrydag 05 Julie 2019 (teen sluitingstyd) op SiVEST se webwerf (http://www.sivest.co.za/, kliek op *Downloads* en soek dan vir die legger '15499 Aletta WEF Amendment') beskikbaar gestel word vir openbare insae. As u 'n elektroniese kopie van die Konsep Motiveringsverslag vir Wysiging (op CD) wil ontvang, moet u u versoek asseblief skriftelik aan die onderstaande Konsultante rig.

Om as 'n B&GP te registreer en/of om meer inligting te bekom, moet u asseblief u naam, kontakbesonderhede en die belang wat u by die aansoek het by SiVEST indien by die kontakbesonderhede hieronder:

STEPHAN JACOBS OF HLENGIWE NTULI

SiVEST Environmental Posbus 2921 **RIVONIA** 2128

Tel: (011) 798 0600 Faks: (011) 803 7272 E-pos: sivest_ppp@sivest.co.za Webwerf: www sivest co za



Appendix C3 **I&AP DATABASE**

PROPOSED DEVELOPMENT OF THE ALETTA 140MW WIND ENERGY FACILITY (WEF), NEAR COPPERTON, NORTHERN CAPE PROVINCE

EA Amendment Motivation Report I&AP Database

		Jul-19
First Name	Last Name	Company
Collen	Aaps	
Abe	Abrahams	DWA
Nicole	Abrahams	SANRAL
Leotasha	Adams	
Cecimac	Adams	
Denwin	Adams	
Noklaas	Adams	
B.N	Adams	
Shadrack	Adams	
Eva	Adams	Siyathemba Local Municipality
Carolyn	Ah Shene-Verdoorn	Birdlife South Africa
Vivian	Algomenew	
Kholiwe	Ana-Miah	
Chantell	Andrea	
Donavin	Andreas	
Frank	Andreas	Siyathemba Local Municipality
Norman	Andries	- 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1
Ronald	Augose	
Johan	Badenhorst	Siyathemba Local Municipality
Musa	Baloye	South African Radio Astronomy Observatory (SARAO)
G	Bams	Department of Military Veterans
Jan Johannes	Basie	Siyathemba Local Municipality
Saul	Basson	Siyathemba Local Municipality
Jakob	Basson	Siyathemba Local Municipality
Jessica	Bell	Styatherniba Local Municipality
M	Berends	
Danie & Jomima	Bernard	FARM: KLIPGATS PAN
Amanda	Bester	Telkom (SA) Ltd
Chon	Beukes	Terkom (SA) Eta
Marizan	Beukes	
Eugene	Block	
Japie	Booisen	
Jonathan	Booth	Birdlife South Africa, Biodiversity Conservation
Corney	Booysen	birdine 30dth Arrica, biodiversity conservation
Corney	Booysen	
	Booysen	Siyathemba Local Municipality
Leeutjie	Bosman	Siyathemba Local Municipanty
Wilson	Bosman	
N		
Felicity	Bosman Bostander	Siyathemba Local Municipality
		Diyatriciliba Lucai iviuilicipality
Elmary Michelle	Botha	
Michelle Evert	Botha	Diaco: Witfontoin & Planumhasch Doortio
Evert	Burger	Plase: Witfontein & Blaauwbosch Poortje
Thoko	Buthelezi	Dept of Agriculture, Forestry & Fisheries
Hettie	Buys	Department of Agriculture, Forestry and Fisheries
Ronny	Cahi	Farm: Witfontein (Erfdeel)
Toni	Cahi	Farm: Witfontein (Erfdeel)
Alexander	Cloete	NC Department of Agriculture, Land Reform and Rural Development
Alicia	Coetzee	
Chaderick	Daniel	

George	Danste	
Justina	De Jager	Plaas: Drielings Pan
Sanda	De Jager	Plase: Drielings Pan & Uitzigt
Aletta	De Jager	Remainder of Drielings Pan No 101
Sanda	de Joofer	Remainder of Briefings Fair No 101
Rene	De Kock	SANRAL: Western Region
Reinette	Devos	JANNAL. Western neglon
Emarentia	Devos	
Joseph	Devos	
Sam	Diokpala	Pixley Ka Seme District Municipality
Albert Basin	Druwie	Tixley Ru Selfic District Mullicipality
Shaun	Dyers	SANRAL Western Region
Silauli	Efraim	JANNAL Western Region
Azrah	Essop	Department of Environmental Affairs
Sam	Fiff	Transnet Freight Rail (Jhb)
Brian	Fisher	Dept of Environment and Nature Conservation
		Dept of Environment and Nature Conservation
Florence Nico	Florence Fourie	Department of Poads & Bublic Works Northern Cana Province
		Department of Roads & Public Works: Northern Cape Province
Pieter	Fourie	Plaas: Nelspoortje
Hilary	Franse	
Willeeia	Franse	07.5
Veronique	Fyfe	G7 Energies
John	Geeringh	Eskom: Transmission
Clement	George	
Quinton	George	
Hannie	George	
	George	
Chantel	George	
Jan	Goeieman	
D	Gouws	
Anthony	Gouws	
Billy	Greieman	
Bushin	Greinhoudt	
Kennedy	Greinhout	
Benson	Gries	
Morgan	Griffiths	WESSA: National
Vivian	Groenewald	Telkom SA SOC Ltd
Nozuko	Gwentsha	
Isaac	Gwija	NC Dept of Environment and Nature Conservation
Billy	Haai	
Charles	Hector	
Natasha	Higgitt	South African Heritage Resources Agency
Phillip	Hine	SAHRA
Alexia	Hlengani	Department of Water and Sanitation
Felicia	Horing	
Edwin	Horn	
HG	Human	
Susanna	Human	
Deon	Human	
Wynand	Human	Farm: Plat Sjambok
Rosilia	Jaars	
Leowellin	Jaars	
Ellios	Jacobs	
Daa:		
Deon	Jacobs	
Deon Magrieta		

۸	Janjies	
A Christelane	•	
	Jantjies	
Lee-Ann	Jantjies	
Whinson	Jochem	
Hilton	Jokers	
Wilson	Joko	Siyathemba Local Municipality
RC	Jonas	
Suzen	Jonkers	
Т	Jooste	M&S Consulting
Katrina	Julies	
Imelda	Julies	SANRAL
Garth	Julius	SANRAL
L	Kakora	Masakane Constructing & Projects
Kate	Katane	SANParks
Isaac	Keeyepitse	
ВН	Kenneth	
Elliot	Khethelo	
Miriam	Kibi	Pixley Ka Seme District Municipality
Romano	Kivido	
Hambakazi	Klaas	
Thobeka	Klaas	
Katriena	Klaaste	
Justice	Klaaste	
Nzima	Klaaste	Jonke Water Plaas
RAndell	Klaasten	
Cerlourty	Klaasten	
Carlo	Klaasto	
Zuritha	Kock	
Sam	Kock	Siyathemba Local Municipality
Johan	Koegelenberg	SENTECH
DJ	Kriegel	
Patricia	Kubashe	
Ernest	Kubayi	Department of Water and Sanitation (Upington)
Samuel	Leche	
Lourens	Leeuwner	EWT
Seoka	Lekota	Department of Environmental Affairs
Patrick	Lenyibi	DEPARTMENT OF SPORT, ARTS & CULTURE
Cindy	Links	,
Zaida	Lottering	
Jennifer	Lottering	
Jack	Louw	
Jacob	Louw	
Pieter	Louw	<u> </u>
Ernstine	Louw	Siyathemba Local Municipality
Liena	Louw	Siyathemba Local Municipality
Dawid	Louw	Siyathemba Local Municipality
IJ	Lubbe	Stydenestica Educativianicipality
Iva	Lubbe	+
Ruben	Lubbe	+
Nubell	Lucky	
Joseph	Ludidi	
Jason Jack	Lukas Maccollan	Divloy Ka Sama District Municipality
		Pixley Ka Seme District Municipality
Julio	Macdonald	Civath amba Lagal Municipality
Giel	MacDonald	Siyathemba Local Municipality
Ryno	Macka	

Gregory MacKay Siyathemba Local Municipality Sindisile Madyo Pixley Ka Seme District Municipality E Maegody Moses Mahunonyane Department of Water & Sanitation Killek Majebe Gelowi Majets Elrico Majico Neelsie Majiet Efraim Majiet Elsabie Male Tiro Malebo J Malgas Jason Malgas Danni Boy Malgas Victor Malgas Felicity Malgas Lorenthia Malgas Siyathemba Local Municipality Malizo Maliwa Armand Malo Mias Malo Jacoline Mans Department of Agriculture, Forestry & Fisheries Dencil Maritz Edwin Maritz Edwin Maritz Edwin Maritz Edwin Maritz Edwin Maritz Edwin Maritz	
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Sean Maritz Pareda Maritz Edwin Maritz	
Pareda Maritz Edwin Maritz	
Edwin Maritz	
Christopher Maritz	
Andrew Maritz	
Vivian Maritz Siyathemba Local Municipality	
Elizabeth Martin Siyathemba Local Municipality	
Mashudu Marubini DAFF Provinical Department	
Simphiwe Masilela Air Traffic Navigation Services	
Clement Matiti	
Selaelo Matlhane South African Radio Astronomy Observatory (SARAO)	
Irene May	
Timothy Mbatha	
Alleta Mclean	
Hendrich Mei	
Hester Meyer Eienaar: Copperton	
Pieter Meyer Plase: Nelspoortje & Vogelstruis Bult	
Moses Mfihlo	
Constance Mgedezi	
Melanie Miles Leads 2 Business	
Kruno Miletic A.J.M. Engineering	
Sonia Miszczak Atlantic Renewable Energy Partners (Pty) Ltd	
Lerato Mokhoantle Department of Water & Sanitation	
David Mokris	
A Molan	
Richard Molepo	
Jane Molepo Siyathemba Local Municipality	
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Graham Mondzinger Air Traffic Navigation Services	
Beatrice Mondzinger Siyathemba Local Municipality	
Lucian Monyora	
Johanna Morobane Air Traffic Navigation Services	
Hettie Morobisi Siyathemba Local Municipality	
Serame Motlhake SENTECH	

Marius	Mowers	
Malibongwe	Mozigagqa	
Thulani	Mthombeni	NC Dept of Environment and Nature Conservation
Danster	Muggel	Siyathemba Local Municipality
Mashudu	Mukoma	Pixley Ka Seme District Municipality
Kevin	Mutheiwana	Department of Mineral Resources
Henning	Myburg	Agri SA: Northern Cape
Onwabile	Ndzumo	NC Dept of Environment and Nature Conservation
V	Ngcobo	NC Department of Roads and Public Works
P.H	Ngogo	Ne Department of Roads and Fublic Works
Nontuthuzelo	Ngxande	
Jim	Nieuwhout	
Sonwabile	Nkondeshe	Dept of Environmental Affairs
Sonwabile	Nkondeshe	Pixley Ka Seme District Municipality
Lorraine	Nobela	Department of Water and Sanitation
Andile	Nombida	Department of Water and Sanitation
N	Nontloko	
Kingsley	Nsia	
Thandile	Ntambula	
S	Ntshovulane	
S Cyril	Nuwegold	
F	October	
r Hester	Olyn	
Paul	Palm	
Weedis	Papier	
Piet	Papier	
В	Paulis	
Ihlaam	Peters	Telkom SA (Ltd)
Jethro	Phetlo	Telkom SA (Ltd)
Nandipha	Phike	
Constance	Phike	
David	Phike	Siyathemba Local Municipality
Vuyiswa	Phillips	Styatherniba Local Maincipanty
Justine	Phillipus	
Isaac	Phooko	CBZ Trading
Klaas	Pieterse	CDZ Trading
Marius	Pieterse	
Lionel	Pieterse	
Paulina	Pieterse	
Rayno	Pieterse	
Nomonde	Pieterse	Siyathemba Local Municipality
Steven	Plaatjies	- ,
S	Plaatjies	
George	Plaatjies	Siyathemba Local Municipality
Dawid	Poya	- ,
Esiwool	Prens	
Anna	Pretorius	Siyathemba Local Municipality
PE	Pule	
Booi	Raats	
Leonardo	Raats	
Mmatlala	Rabothata	Department of Environmental Affairs
Samantha	Ralston-Paton	BirdLife South Africa
Ntsundeni	Ravhogoni	Department of Mineral Resources (DMR)
Piet	Reid	
Jaco	Roelofse	NC Department of Roads & Public Works
Ben Lehlohonolo	Roestof	Mvelaphanda Trading
	1	aakiidiida iradiiiD

Florence	Poman	
	Roman	
Ricardo	Rygard	
E	Scott	
ET	Segwabe	
Anina	Selemog	
Cherine	Serwin	
Busang	Sethole	South African Radio Astronomy Observatory (SARAO)
Sia	Shahleda	
Magdaline	Shimane	
JF	Sizingile	
Vivian	Skethers	Future Making Construction
Kevin	Slinger	
Abrie	Smit	
Rosinia	Smit	Siyathemba Local Municipality
Quinton	Smith	
Syanda	SObhuza	
Thokozani	Somazi	
Nonzwakazi	Sononza	
Candice	Spammer	Telkom Wayleave
Gloria	Speelman	Siyathemba Local Municipality
AV	Staden	
IWJ	Stadhouer	Siyathemba Local Municipality
Fundise	Steenkamp	
Likas	Steenkamp	Plaas: Jackals Water
Lizell	Stroh	SA Civil Aviation Authority
Thamsanga	Swangazi	·
Merillyn	Taaibos	
Neliswa	Takatayo	
Ertjies	Taljaart	Eskom: Distribution (Prieska)
Bos	Tander	
Johannes	Thys	
Andrew	Timothy	SAHRA (Northern Cape)
Adriaan	Tiplady	Square Kilometre Array
Betty	Titus	Siyathemba Local Municipality
Themba	Tobais	
Olwethu	Tshekela	Siyathemba Local Municipality
Jiyana	Tsheye	
Stanley	Tshitwamulomoni	Department of Environmental Affairs
Howard	Tsume	Siyathemba Local Municipality
WP	Tyhala	Stydenemba Edear Warnelpancy
A	v Schalkwyk	
Heleen	van den Heever	Telkom (SA) Ltd
Thys	van der Hout	Solek
Berend	van Deventer	Agama Exploration and Mining
TD	Van Rooyen	Notice Exploration and Milling
Dennien	•	
Ralph	Van Schalkwyk	
Rudolf	Van Schalkwyk Van Schalkwyk	
Johannes	•	Sivathomba Occupational Health Care
Carlos	Van Schalkwyk Van Staden	Siyathemba Occupational Health Care
		Sivathomba Local Municipality
William	van Staden	Siyathemba Local Municipality
Stanford	Van Wyk	+
Grandwill	Van Wyk	+
Danster	Van Wyk	
Igwatens	Van Wyk	
Frans	van Wyk	Gemeend Trust

Dirk	van Wyk	Loretha Trust
Johannes	Van Wyk	Plaas: Uitzigt
Gerhard	Van Wyk	Plase: Bosjesmansberg & Blaauwbosch Poortje
F M	Van Wyk	Siyathemba Local Municipality
F.M.	Van Wyk	Siyathemba Local Municipality
BG	Van Zyl	
Solman	Van Zyl	Plaas: Doonies Pan
Lu-Whelin	Vass	
Elvis	Vayeka	
Nicolene	Venter	Imaginative Africa (Pty) Ltd
Albertus	Vermeulen	Jonkerwater Plaas
Irvan	Visagie	
Р	Visagie	
Heinrich	Visser	
Valentia	Visser	
Gert	Visser	
Ricardo	Vlem	
Haward	Vries	
Ferlicia	Ward	Air Traffic Navigation Services
Nathan	Webb	
Heinrich	Wildt	
Andry	Willemse	
Benito	Williams	
Ragel	Williams	
Nasem	Wisen	
Colin	Witbooi	
Julleen	Witbooi	
Johannes	Wolmarans	Solek
Frank	Wylbach	
Qiuntun	Wylbacht	
Mandisa	Yawa	Pixley Ka Seme District Municipality
Thandeka	Yawa	Siyathemba Local Municipality
Collin	Zee	
RW	Zongula	
Roslin	Zziwa	Siyathemba Local Municipality



Appendix C4 CORRESPONDENCE





TO I&APs







Appendix C5 COMMENTS AND RESPONSE REPORT (C&RR)

PROPOSED DEVELOPMENT OF THE ALETTA 140MW WIND ENERGY FACILITY (WEF) AND ASSOCIATED INFRASTRUCTURE NEAR COPPERTON, NORTHERN CAPE PROVINCE

Part 2 Amendment - Final Environmental Authorisation (EA) Amendment Motivation Report

PART 2 AMENDMENT

COMMENTS AND RESPONSE REPORT (C&RR) – FINAL ENVIRONMENTAL AUTHORISATION (EA) AMENDMENT MOTIVATION REPORT

PROPOSED DEVELOPMENT OF THE ALETTA 140MW WIND ENERGY FACILITY (WEF) AND ASSOCIATED INFRASTRUCTURE NEAR COPPERTON, NORTHERN CAPE PROVINCE

SUMMARY OF ENVIRONMENTAL ISSUES/CONCERNS AND SUGGESTIONS RAISED BY INTERESTED AND/OR AFFECTED PARTIES (I&APS), STAKEHOLDERS AND ORGANS OF STATE (OoS) / AUTHORITIES

DECEMBER 2018 – JULY 2019

Interested and/or Affected Parties (I&APs), stakeholders and Organs of State (OoS) / Authorities who contributed issues ranging across all sectors of society are recorded in this Comments and Response Report (C&RR). Full record of every issue raised is available from the public participation office and is also included in **Appendix C5** of the Draft Environmental Authorisation (EA) Amendment Motivation Report. Similar issues raised have been grouped together. The name, affiliation and date of the commentator are also indicated. Technical comments made by the project team are not included in the C&RR.

PROPOSED DEVELOPMENT OF THE ALETTA 140MW WIND ENERGY FACILITY (WEF) AND ASSOCIATED INFRASTRUCTURE NEAR COPPERTON, NORTHERN CAPE **PROVINCE**

Part 2 Amendment – Final Environmental Authorisation (EA) Amendment Motivation Report

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ABBREVIATIONS

C&RR Comments and Response Report DEA Department of Environmental Affairs

EΑ **Environmental Authorisation**

EAP **Environmental Assessment Practitioner** EIA **Environmental Impact Assessment EMPr**

Environmental Management Programme

FEIAr Final Environmental Impact Assessment Report

GN **Government Notice**

NC DRPW Northern Cape Department of Roads and Public Works

OoS Organs of State

SARAO South African Radio Astronomy Observatory

SKA Square Kilometre Array WEF Wind Energy Facility

Part 2 Amendment – Final Environmental Authorisation (EA) Amendment Motivat	Part 2 Amendment – Final Environmental Authorisation (EA) Amendment Motivation Report				
Issue/Comment	Raised By	Response			
1. F	Project / Process Related Commen				
ACKNOWLEDGEMENT OF RECEIPT OF APPLICATION FOR	Sabelo Malaza	In light of the DEA's response, an amendment process in terms of Part			
AMENDMENT OF ENVIRONMENTAL AUTHORISATION ISSUED	Chief Director: Integrated	2 of Chapter 5 of the Environmental Impact Assessment (EIA)			
ON 09 MAY 2017 FOR THE ALETTA WIND ENERGY FACILITY AND	Environmental Authorisations:	Regulations 2014, as amended, was followed accordingly. As such, an			
ITS ASSOCIATED INFRASTRUCTURE NEAR COPPERTON	Department of Environmental	Environmental Authorisation (EA) Amendment Motivation Report which meets all of the requirements as stipulated in the DEA's			
WITHIN THE SIYATHEMBA LOCAL MUNICIPALITY IN THE	Affairs (DEA) Letter via email:	acknowledgment letter (refer to Table 1 in Section 1 of the Draft EA			
NORTHERN CAPE PROVINCE	23 April 2019	Amendment Motivation Report) was compiled to assess the impacts			
The Department confirms having received your application for	20 / (piii 2010	and implications of the proposed amendments and was submitted to			
amendment of the environmental authorisation (EA) on the 11 April		the competent authority (namely the DEA) for decision-making			
2019.		purposes. An assessment of all impacts related to the proposed			
		amendments is provided in Section 3 of the Final EA Amendment			
Following further review of your application for amendment of EA, the		Motivation Report. It should however be noted that that the proposed			
Department has come to the conclusion that your application for		amendments will not result in any additional negative environmental			
amendment of EA falls within the ambit of amendments to be applied		impacts, over-and-above those already assessed in the FEIAr and			
for in terms of Part 2 of Chapter 5 of the Environmental Impact		authorised in the EA issued on 09 May 2017, and will not change the			
Assessment (EIA) Regulations, 2014, as amended. The reason for		nature or scope of the proposed development from what was			
the above is:		assessed. No additional impacts will therefore be associated with the proposed amendments and the environmental impacts identified in the			
Regulation 31 (Part 2 Amendments) of the EIA regulations states that		FEIAr dated 20 January 2017 are still applicable.			
"An environmental authorisation may be amended by following the		T EIAI dated 20 dandary 2017 are still applicable.			
process prescribed in this Part if the amendment will result in a		The advantages and disadvantages associated with the proposed			
change to the scope of a valid environmental authorisation where		amendments are discussed in Section 5.1 and Section 5.2 of the Final			
such change will result in an increased level or nature of impact where		EA Amendment Motivation Report respectively.			
such level or nature of impact was not-					
(a) assessed and included in the initial application for environmental		In terms of the measures to ensure avoidance, management and			
authorisation; or		mitigation of impacts associated with such proposed amendments, no			
(b) taken into consideration in the initial environmental authorisation;		new mitigation measures will be required as the proposed			
		amendments will not result in any additional negative environmental impacts, over-and-above those already assessed. The mitigation			
Based on the information provided in the submitted application for		measures provided by the various specialists as outlined in the FEIAr			
amendment, the proposed application for amendment seeks to		dated 20 January 2017 would therefore need to be considered and			
include, as part of the EA with DEA Ref No. 14/12/16/3/3/2/945 the		implement. In light of this, no changes were required to the Draft			
following:		Environmental Management Programme (EMPr) which was submitted			

1. The change in the turbine specification- Amendment to the authorised hub height, rotor diameter and generation capacity for the wind turbine.

Having reviewed the submitted documents and taking the abovementioned into consideration, the Department hereby notifies you that the proposed changes to EA 14/12/16/3/3/2/945 are therefore considered a change of scope.

As such, you are therefore referred to regulation 32 of GN R. 982. You are requested to submit the following documents within 90 days of the receipt of this application by the competent authority, as per regulation 32(1) (a) of GN R. 982:

a report, reflecting:

- An assessment of all impacts related to the proposed change;
- ii. advantages and disadvantages associated with the proposed change; and
- iii. measures to ensure avoidance, management and mitigation of impacts associated with such proposed change; and
- iv. any changes to the EMPr.

In addition to the abovementioned, you are required to inform all potential and registered interested and affected parties, including organs of state which have jurisdiction in respect of any aspect of the relevant activity, of the required amendments. Interested and affected parties and relevant organs of state must be given 30 days to comment on the draft report compiled in terms of regulation 32(1)(a) of GN R. 982. Comments received during the commenting period must be incorporated into a final report to be submitted to the competent authority for decision-making.

Should there be significant changes or new information that has been added to the report after the initial commenting period, you are

along with the FEIAr dated 20 January 2017, other than updates as a result of the comments received from Authorities / OoS during the 30-day comment period.

In addition, the Public Participation Process was conducted as outlined in Chapter 6 of the EIA Regulation 2014 (as amended) as was requested by the DEA. All affected landowners, as well as the relevant provincial authority, were notified about the application to amend the EA via email prior to the application being submitted to the DEA on 11 April 2019 (Proof of these notifications is provided in **Appendix C6** of Final EA Amendment Motivation Report). Advertisements (English and Afrikaans) were placed in the "Gemsbok" local newspaper on Wednesday the 29th of May 2019 (Appendix C2 of Final EA Amendment Motivation Report). Accordingly, site notices were also placed on the boundary of the application site on Friday the 31st of May 2019 (Appendix C1 of Final EA Amendment Motivation Report. Photos and GPS coordinates of the site notices which were erected are also included in the Final EA Amendment Motivation Report). Where stakeholders responded (see Appendix C4 of Final EA Amendment Motivation Report for project PPP correspondence) to advertisements, they were registered on the project database. It should be noted that all Interested and/or Affected Parties (I&APs), stakeholders and Organs of State (OoS) / Authorities were given 30 days to comment on the Draft EA Amendment Motivation Report, which has been compiled in terms of regulation 32(1)(a) of GN R. 982 (as amended). The Draft EA Amendment Motivation Report was made available to the public for review on SiVEST's website (http://www.sivest.co.za/, click on Downloads, then browse to the folder '15499 Aletta WEF Amendment') for a period of 30 days from Monday 03 June 2019 to Friday 05 July 2019. It should be noted that all the key stakeholders / OoS / authorities were sent electronic copies (on CD) of the Draft EA Amendment Motivation Report (including all therefore required to comply with regulation 32(1)(b) of GN R. 982 which states:

"The applicant must within 90 days of receipt by the competent authority of the application made in terms of regulation 31, submit to the competent authority-a notification in writing that the report will be submitted within140 days of receipt of the application by the competent authority, as significant changes have been made or significant new information has been added to the report, which changes or information was not contained in the report consulted on during the initial public participation process contemplated in sub regulation (1)(a) and that the revised report will be subjected to another public participation process of at least 30 days."

In the event where regulation 32(1)(b) of GN R. 982 applies, the report, which reflects the incorporation of comments received, including any comments of the competent authority, must be submitted to the competent authority within 140 days of receipt of the application by the competent authority.

You are also advised that the Public Participation Process must be conducted as outlined in Chapter 6 of the EIA Regulation, 2014 as amended.

Should you fail to meet any of the timeframes stipulated in regulation 32 of Part 2 of Chapter 5 of Environmental Impact Assessment Regulations, 2014, as amended, your application will lapse.

COMMENTS ON THE DRAFT AMENDMENT REPORT FOR THE APPLICATION FOR AMENDMENT OF ENVIRONMENTAL AUTHORISATION ISSUED ON 09 MAY 2017 FOR THE ALETTA WIND ENERGY FACILITY AND ITS ASSOCIATED INFRASTRUCTURE COPPERTON NEAR WITHIN THE SIYATHEMBA LOCAL MUNICIPALITY IN THE NORTHERN CAPE **PROVINCE**

Sabelo Malaza
Chief Director: Integrated
Environmental Authorisations Department of Environmental
Affairs (DEA)
Letter via email: 28 June 2019

appendices) during the 30-day comment and review period (see **Section 6.8** of Final EA Amendment Motivation Report). All comments received throughout the EA amendment process (including comments received during the Draft EA Amendment Motivation Report's commenting period) were incorporated into the Final EA Amendment Motivation Report, which has been submitted to the competent authority (namely the DEA) for decision-making. Additionally, all comments received throughout the EA amendment process has been included in the Comments and Response Report (C&RR).

No significant changes or new information was added to the Draft EA Amendment Motivation Report after the initial commenting period, the EAP confirms that regulation 32(1)(b) of GN R. 982 is not applicable.

As mentioned above, the Public Participation Process was conducted as outlined in Chapter 6 of the EIA Regulation 2014, as amended. Details regarding the Public Participation activities that has been undertaken to date, is detailed in **Section 6** of the Final EA Amendment Motivation Report.

The Department's comment regarding the adherence to the timeframes stipulated in regulation 32 of Part 2 of Chapter 5 of the EIA Regulations 2014, as amended, is duly noted. The EAP will ensure that the timeframes stipulated in regulation 32 of Part 2 of Chapter 5 of the EIA Regulations 2014, as amended, are adhered to.

(a) Public Participation Process

- A list of registered interested and/or affected parties (I&APs), stakeholders and Organs of State (OoS) / Authorities, as per Regulation 42 of the NEMA EIA Regulations, 2014 (as amended), has been provided in **Appendix C3** of the Final EA Amendment Motivation Report.
- 2. Copies of original comments received from I&APs, key stakeholders and OoS / Authorities, which have jurisdiction in

The Environmental Authorisation (EA) issued for the above application by this Department on 09 May 2017 (14/12/16/3/3/2/945); the Application for Environmental Authorisation received by the Department on 11 April 2019; the acknowledgement letter from the Department dated 23 April 2019; and the Draft Amendment report received by the Department on the 03 June 2019, refer.

The application for amendment of the EA addresses the following:

- a) The applicant, BioTherm Energy (Pty) Ltd, was initially authorised for '60 wind turbines with a total output of 140MW.
 Turbines will have a hub height of 100m, a rotor diameter of 125m and a generation output of 3MW each
- b) The applicant now intends using a larger turbine for the development, namely the Acciona AW 140/3465 TH 120 with a hub height of 120m and a rotor diameter of 140m and is therefore applying for an amendment to the existing EA to increase the approved hub height of 100m and rotor diameter of 125m.
- c) Ten out of the eleven specialist studies undertaken during the original EIA process all considered the impacts of turbines with a maximum hub height of 120m and with maximum rotor diameters of 150m. Therefore, the mitigations and recommendations of the specialist studies remain valid for this amendment application.
- d) The Electromagnetic Interference Path Loss and Risk Assessment (Including Emission Control Plan - (ECP)) undertaken during the original EIA process considered the Acciona AW 125 TH 100A, with a hub height of 100m and a rotor diameter of 125m. Since the application was lodged, the ECP has been updated and included for comment with amendment report.

The Department has the following comments on the abovementioned application:

respect of the proposed activity, have been submitted to the Department with the Final EA Amendment Motivation Report accordingly. These are provided in **Appendix C4** of the Final EA Amendment Motivation Report. Additionally, all consultation and/or correspondence with the DEA is provided in **Appendix B** of the Final EA Amendment Motivation Report.

It should be noted that comments with regards to the Square Kilometer Array (SKA) were sought from the South African Radio Astronomy Observatory (SARAO), as this organisation is responsible for managing all radio astronomy initiatives and facilities in South Africa. They were contacted via telephone on 11 July 2019 in order to confirm this. The SKA were however also included in the public participation process and were requested to provide comments on the proposed amendments (refer to Appendix C3 of Final EA Amendment Motivation Report for I&AP database). All comments received with regards to the SKA have been included in Appendix C4 of the Final EA Amendment Motivation Report.

- 3. Proof of correspondence with the various stakeholders, including OoS / Authorities which have jurisdiction in respect of the proposed activity, has been included in **Appendix C4** of the Final EA Amendment Motivation Report. Additionally, all consultation and/or correspondence with the DEA is provided in **Appendix B** of the Final EA Amendment Motivation Report. Where the EAP was unable to obtain comments, proof of the attempts that were made to obtain comments has been provided (please refer to **Table 7** in **Section 6.8** of the Final EA Amendment Motivation Report).
- All issues raised and comments received during the circulation of the Draft EA Amendment Motivation Report from I&APs, key stakeholders and OoS / Authorities which have jurisdiction in

(a) Public Participation Process

The following information must be submitted with the Final Amendment Report:

- A list of registered interested and affected parties as per Regulation 42 of the NEMA EIA Regulations, 2014, as amended.
- Please ensure that copies of original comments received from I&APs and organs of state, which have jurisdiction in respect of the proposed activity are submitted to the Department with the final Amendment Report. Kindly ensure that the Square Kilometer Array (SKA) comments are included in the document.
- 3. Proof of correspondence with the various stakeholders, including organs of state which have jurisdiction in respect of the proposed activity, must be included in the final Amendment Report. Should you be unable to obtain such comments, proof should be submitted to the Department of the attempts that were made to obtain the comments.
- 4. All issues raised and comments received during the circulation of the draft Amendment Report from I&APs and organs of state which have jurisdiction in respect of the proposed activity are adequately addressed in the final Amendment Report, including comments from this Department, and must be incorporated into a Comments and Response Report.
- 5. Please refrain from summarising comments made by I&APs. All comments from I&APs must be copied verbatim and responded to clearly. Please note that a response such as "noted" is not regarded as an adequate response to an I&AP's comments.
- (b) General
- 1. You are requested to submit one (1) unprotected electronic copy (1 CD/DVD/USB) and one (1) hard copy of the final Amendment

- respect of the proposed activity have been incorporated into the Comments and Response Report (C&RR), and have been responded to where required;
- 5. The EAP has refrained from summarising comments made by I&APs, key stakeholders and OoS / Authorities. All comments from I&APs key stakeholders and OoS / Authorities have been copied verbatim and responded to clearly. All comments received throughout the EA amendment process have been provided in Appendix C4 of the Final EA Amendment Motivation Report.

(b) General

- The EAP will submit one (1) unprotected electronic copy (via CD/USB) and one (1) hard copy of the Final EA Amendment Motivation Report to the Department. The EAP has ensured that an electronic version of the amendment application form is also provided.
- 2. The Department's comment is duly noted. All requirements of Regulation 32 of the EIA Regulations, 2014 (as amended), have been complied with.
- The Department's comment is duly noted. The EAP has ensured that the timeframes prescribed in terms of Regulation 45 of the EIA Regulations, 2014 (as amended), have been met.
- 4. The Department's comment is duly noted. No activity will commence prior to an environmental authorisation being granted by the Department.

Part 2 Amendment – Final Environmental Authorisation (EA) Amendment Motiva	mon report	
Report to the Department. Please ensure that this copy contains an electronic version of the amendment application form.		
You are also advised to comply with the requirements of the Regulations 32 of the EIA Regulations 2014, as amended.		
3. Further note that in terms of Regulation 45 of the EIA Regulations 2014, this application will lapse if the applicant fails to meet any of the timeframes prescribed in terms of these Regulations, unless an extension has been granted in terms of Regulation 3(7).		
4. You are hereby reminded of Section 24F of the National Environmental Management Act, Act No 107 of 1998, as amended, that no activity may commence prior to an environmental authorisation being granted by the Department.		
Please find attached Eskom requirements for developments at or near	John Geeringh	These documents were forwarded to the applicant for consideration
Eskom infrastructure and servitudes. This is an updated version of the	Senior Consultant:	and will be strictly adhered to during the pre-construction, construction,
original setbacks document.	Environmental Management	operation and decommissioning phases of the project. In addition,
	Eskom	Eskom's requirements for developments at or near Eskom
	Email: 10 June 2019	infrastructure and servitudes have been incorporated into the Draft
		EMPr which was submitted as part of the FEIAr dated 20 January
		2017. The Draft EMPr which contains these requirements is provided
		in Appendix D of the Final EA Amendment Motivation Report. This
		document has also been attached to the Final EA Amendment
		Motivation Report (Appendix C4).
We have received notice via fast mail (disk) for amendment of Amend	Serame Motlhake	Kmz file was sent to Mr Motlhake on Tuesday 18 June 2018. Mr
Aletta 140MW Wind Energy Facility near Copperton in Northern Cape.	Manager: Broadcast Planning	Motlhake was advised to let SiVEST know if he has anymore enquiries
Can you kindly send us the layout of the farm in kmz or kml format so	SENTECH	so that they can be addressed (see Appendix C4 of Final EA
that we are able to conduct a study.	Email: 13 June	Amendment Motivation Report for copy of correspondence with Mr
		Motlhake).
		Beenenee from Henrius Nauli (CiVECT) vie amail au 40 ture 2040
		Response from Hlengiwe Ntuli (SiVEST) via email on 18 June 2019 Good Day Serame,
		Kindly find attached kmz file as requested.

Fait 2 Americanent – Final Environmental AdditionSation (EA) Americanent Motival		
		Please feel free to contact me should you need anything else.
		Response from Andrea Gibb (SiVEST) via email on 19 June 2019 Dear Serame,
		As requested, attached is the kmz file indicating the layout of the wind energy facility.
Good Morning Andrea,	Serame Motlhake	SENTECH's comments were duly noted and were forwarded to the
The study was completed and letter of approval submitted yesterday.	Manager: Broadcast Planning SENTECH Letter via email: 19 June	applicant for consideration. The applicant will ensure that all terms and conditions provided by SENTECH are adhered to during the preconstruction, construction, operation and decommissioning phases of
Attached please find letter of approval for the planned WTG in NC.		the project. In addition, all terms and conditions provided by SENTECH
Proposed establishment of Aletta 140MW Wind Energy Facility in the Northern Cape Province:		have been incorporated into the EMPr which was submitted as part of the FEIAr dated 20 January 2017. The Draft EMPr which contains these terms and conditions is provided in Appendix D of the Final EA
The above matter refers.		Amendment Motivation Report. This document has also been attached
We wish to advise that SENTECT SOC Ltd ("SENTECH") has		to the Final EA Amendment Motivation Report (Appendix C4).
received the application from SiVEST Environmental ("the		
applicant"), which plans to construct Wind Turbine Generator		Response from Stephan Jacobs (SiVEST) via email on 20 June
(WTG) farm as described in annexure 1 hereto, at the near		2019
Copperton in the Northern Cape Province hereafter referred to as		Good Morning Serame,
"Aletta 140MW Wind Energy Facility Farm", in accordance with the		good monning columns,
provisions of Section 29(1)(b) of the Electronic Communications		Letter of approval received. Thank you very much for this, it is greatly
Act no. 36 of 2005 ("the Act").		appreciated.
3. SENTECH has analysed the information provided by the applicant		appreciated.
in accordance with the provisions of Section 29(1) (c) of the Act,		
and specifically the location of the site and confirm that there would		
be limited degradation of SENTECH transmitted Terrestrial		
UHFNHF Television (TV), and/or FM radio services in the planned		
deployment area, as indicated in annexure 1.		
4. SENTECH hereby grants the applicant approval to proceed with		
the construction of its energy project at the site subject to the		
following terms and conditions:		

- 4.1 Due to the fact that the findings made by SENTECH are based on simulations and calculated on a theoretical model, using available data and assumptions where no data was provided, such findings may change at any time should any further information be made available to or come to SENTECH's attention;
- 4.2 At any time after the approval, and during construction of the project, should any radio transmissions be affected by construction activities, SENTECH will give the applicant 7 (seven) day's written notice to remove the cause of the interference.
- 4.3 Under no circumstances whatsoever will SENTECH be liable to the applicant or any third party for any damages, loss or costs, of any nature whatsoever or howsoever arising, suffered as a consequence of the aforementioned request and the applicant fully indemnify SENTECH.
- 4.4 SENTECH prior written consent must first be obtained before any construction activities underneath, along, across or within close proximity to SENTECH infrastructure can begin and shall comply with the applicable SENTECH guidelines relating to clearances between equipment and the proposed construction activity. Furthermore, the applicant shall clearly adhere to, and ensure all installations shall be fully compliant with the Occupational Health and Safety Act No. 85 of 1993.
- 5. This approval is further subject to the submitted applications boundaries or structures listed in annexure 1 hereto, the materials used, as well as the size and positioning of structures declared in the application. If the services of SENTECH or its clients is in any way compromised by a deviation or change of this submission, the applicant shall be liable for all costs to re-establish, or relocate the services, and under no circumstances whatsoever will SENTECH be liable to the applicant or any other third party for any damages, loss or costs, of any nature whatsoever or howsoever arising, suffered as a consequence.

- 6. This approval is valid and applicable between SENTECH and the applicant only. It does not include any approval for any of the other electronic communication operators which have current cosharing agreements to utilise SENTECH's radio masts.
- Any additions, amendments, additional structures to be built, or any change to the energy farm boundaries, will require a new application to SENTECH.
- 8. The validity of this approval is for a period of 12 (twelve) months. If construction of the designed project commences after the expiry of the twelve (12) month period, the application must be resubmitted to SENTECH for further evaluation and approval.
- 9. This approval does not imply any rights of access whatsoever to SENTECH property or use of SENTECH's access roads for construction or maintenance of the design project. Separate permission must be obtained from SENTECH in this regard. Furthermore, SENTECH reserves the right to claim damages in terms of Section 29 of the Act, for any loss or damages sustained as a result of damages to any of SENTECH's electronic broadcast and communications infrastructure.
- 10. The applicant shall, in carrying out any work or project, take all the necessary precautions for the safety of SENTECH's employees, contractors, representatives and its property, including the radio transmitters and links on or near the site against damages as a result of construction of the applicant's energy project.
- 11. The applicant shall be liable for all and any direct and/or indirect, and/or consequential damages or injury that may be caused by the applicant, its contractors, subcontractors, employees, agents or representatives to any employee, contractor, representative or property of SENTECH including radio network transmitters and/or links or land which may have been disturbed shall be restored to the same condition in which it was before commencement of the construction of the energy project.
- 12. In no event will SENTECH, its employees, contractors, or representatives be liable to the applicant or any third party

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whatsoever for special, collateral, exemplary, direct, indirect,		
incidental, consequential or any other damages of any nature		
whatsoever or howsoever arising (including without limitation, loss		
of goodwill, loss of profits or revenues, loss of savings, loss of use,		
interruptions or noisiness, or injury) whether or not such damages		
or injury occurred prior or subsequent to, or are alleged as a result		
of any SENTECH radio network approved and/or not approved in		
terms of this letter, even if SENTECH has been advised of the		
possibility of such damages or injury.		
possionity of such damages of injury.		
ANNEXURE1		
Proposed establishment of Aletta 140MW Wind Energy Facility which		
is located approximately 26km south-west of the Prieska C46		
transmitter site. The Aletta 140MW Wind Energy Facility will consist of		
a total amount of 60 Wind turbine generators.		
Conclusion on the results and findings of the planned 60 Wind Turbine		
Generators can be summarised as follow:		
1. No interference to be caused to analogue television and OTT TV		
coverage services in Prieska and surrounding areas.		
2. No interference on FM services will be experienced;		
3. None of the existing FM RBR feeds broadcast feeds in the area		
will be affected;		D (01/50T) 1 // 00 /
RE: ALETTA WIND ENERGY FACILITY	Graham Mondzinger	Response from Stephan Jacobs (SiVEST) via email on 20 June
	Obstacle Evaluator: COO - Air Traffic Services	<u>2019</u>
The proposed Aletta Wind Energy Facility is in close vicinity to	Air Traffic Navigation Services	Good Afternoon Mr Mondzinger,
Alkantpan Aerodrome and Prieska Aerodrome, the relevant	(ATNS)	
stakeholders should be contacted to make comments regarding the	Email: 05 July 2019	Comments with regards to the EA Amendment Process for the Aletta
proposed wind energy facility.		Wind Energy Facility have been received. Thank you very much for
		this.
We would have to conduct a formal Communication, Navigation and		
Surveillance (CNS) assessment as per South African Civil Aviation		
Authority (SACAA) request, due to the possible impact on the ATNS		

Secondary Surveillance Radar(SSR) in the De Aar area.

The line of sight may be affected upon a Terrain profile assessment, as the radar extends to a 200NM radius.

The proposed could create blanking and/or screening effect and reflections.

We request that you please update us should there be any new developments that may affect our interests.

We will duly conduct assessments as required when the project is ready for construction upon a formal request. Please note there is a charge attached to this service.

Please note, for us to carry out a successful assessment we require the following information:

- 1. LOCATION (Co-ordinates WGS84 system) for each turbine.
- 2. SITE/GROUND ELEVATION (AMSL) for each turbine
- 3. THE NUMBER OF WIND TURBINES
- 4. KMZ FILE FOR THE PROPOSED SITE
- 5. HEIGHT TO TOP OF STRUCTURE (in meters)

Furthermore, we kindly request that all queries or new applications to be forwarded to the Obstacle Evaluators on the following:

ObstacleEvaluator@atns.co.za

Your comments will be forwarded to the developer for consideration accordingly. In addition, we will ensure that all queries or new applications are forwarded to the Obstacle Evaluators (ObstacleEvaluator@atns.co.za).

Your input in this regard is greatly appreciated.

Please see below for details regarding how ATNS' comments have been addressed and/or responded to:

- Since the proposed development is in close vicinity to Alkantpan Aerodrome and Prieska Aerodrome, the South African Civil Aviation Authority (SA CAA) were contacted in order to make comments regarding the proposed wind energy facility. A copy of the I&AP database is provided in Appendix C3 of the Final EA Amendment Motivation Report. It should be noted that no comments have been received from the SA CAA to date. All correspondence and/or notifications sent to the SA CAA is provided in Appendix C2 and Appendix C4 of the Final EA Amendment Motivation Report.
- The applicant has been notified about ATNS' request to conduct a
 formal Communication, Navigation and Surveillance (CNS)
 assessment as per SACAA request, due to the possible impact on
 the ATNS Secondary Surveillance Radar (SSR) in the De Aar
 area. The applicant will contact ATNS in order to make the
 necessary arrangements for this assessment.
- The applicant has been made aware of the fact that the line of sight may be affected, as well as the fact that the proposed development could create blanking and/or screening effect and reflections.
- ATNS, as well as all other relevant stakeholders in this regard, will be updated should there be any new developments that may affect their interests.

a typical road reserve of 40m.

which was submitted as part of the FEIAr dated 20 January 2017. The

 A traffic control/accommodation plan for during construction/execution phase and designs/drawings (Layout plan) for all proposed accesses (GPS coordinates for which must be provided), must be submitted to the DRPW for approval prior to any execution of works.

The following are conditions that must be complied with at all times in case of any work undertaken within the statutory road reserve or within a distance of 95 meters from the centerline of any building restriction road (advertising on Roads and Ribbon Development Act, no.21 of 1940) and within 5 meters from the statutory boundary of any public road (Roads Ordinance, 19 of 1976).

- 1. One ERF/property will only be allowed one access from the MR771 public road.
- 2. It is the applicant's duty to notify and meet all affected stakeholder's requirements and interests on proposed development.
- Any alterations and/or additional proposals post this response letter must be communicated to the DRPW for approval prior to any execution.
- 4. The conditions of this wayleave are applicable to the owner as well as the successor-in-title. If property rights transferred to any other person or institution, the onus will be on you to bring contents of this wayleave to the attention of your successor-in-title as the conditions of this response letter along with your property rights will be transferred to the successor-in-title and will still be applicable.
- 5. No outdoor advertising is permitted on a fence or within 500m from the public road.
- 6. This response letter does not exempt the applicant from complying with any other law that may be applicable to the proposed work and related activities

Draft EMPr which contains these conditions is provided in **Appendix D** of the Final EA Amendment Motivation Report. The document containing these conditions has also been attached to the Final EA Amendment Motivation Report (**Appendix C4**).

2. Communication Related Comments/Issues

Hi Stephan and Hlengiwe, Please could you register G7 on the Aletta WEF I&AP database with the email address eia@g7energies.com.	Veronique Fyfe Interested and/or Affected Party (I&AP) G7 Energies	G7 Energies were registered on the I&AP database with the email address provided, as requested. The I&AP database is provided in Appendix C3 of the Final EA Amendment Motivation Report.
Thanks.	Email: 03 June 2019	Response from Stephan Jacobs (SiVEST) via email on 03 June 2019 Thank you for your email. We will ensure that G7 is registered on the database with the email address provided below.
Thank you very much. I have tried to download the documents off the website but there is an error on all the documents. Please can you send me them in a drop box link or via email. Thank for sending this through I was able to access the documents.	Veronique Fyfe Interested and/or Affected Party (I&AP) G7 Energies Email: 04 June 2019	Response from Stephan Jacobs (SiVEST) via email on 04 June 2019 Noted, thank you very much for informing us about this. We will investigate and rectify. Will share these documents with you shortly, either via email or via a Dropbox or OneDrive link.
		Response from Stephan Jacobs (SiVEST) via email on 04 June 2019 The email below refers. Please find attached a link to the OneDrive folder I created which contains the Draft EA Amendment Motivation Report and all appendices for the Aletta Wind Energy Facility (WEF) EA Amendment process.
		https://1drv.ms/u/s!AtQQYK2h07qogQQoYm SQ1svla1g?e=4a0XXu You will need to create a Microsoft account (if you don't already have one) to access this folder. Please let me know if there are any issues accessing this.
		No response was received from G7 Energies after the link to the OneDrive folder was sent via email. It was thus assumed that they had no further issues downloading the Draft EA Amendment Motivation Report and all appendices.
Thank you for the notification. Please create an application on SAHRIS and upload the documents for review. Once completed, please ensure that the status of the case is changed to SUBMITTED.	Natasha Higgitt Heritage Officer: Archaeology, Palaeontology and Meteorites (APM) Unit	SiVEST uploaded the Draft EA Amendment Report (and all other relevant documentation for review) to the existing Aletta Wind Energy Facility case on SAHRIS, changed the status of the case to SUBMITTED and notified Natasha Higgitt of this via email accordingly

Part 2 Amendment - Final Environmental Authorisation (EA) Amendment Motivation Report South African Heritage (see below). Proof of this is provided in **Appendix C7** of the Final EA Resources Agency (SAHRA) Amendment Motivation Report. Additionally, all correspondence Email: 03 June 2019 undertaken with SAHRA is provided in Appendix C4 of the Final EA Amendment Motivation Report. Response from Hlengiwe Ntuli (SiVEST) via email on 05 June 2019 Good Morning Natasha, Please note that the report has been uploaded to the website. 3. Heritage Related Comments/Issues Natasha Higgitt A letter from SAHRA was provided in response to Part 2 amendment process for the proposed Aletta Wind Energy Facility. Heritage Officer: Archaeology, Palaeontology and Meteorites **Final Comment** Unit adhered to accordingly. The SAHRA Archaeology, Palaeontology and Meteorites (APM) Unit SAHRA is satisfied that the proposed amendments will not increase the Letter via SAHRIS: 28 June significance of the impacts to heritage resources as identified in the 2019 initial EA Application. The recommendations contained within the reports conducted in 2017 still apply, as does the conditions provided in the Final Comment issued by SAHRA on the 31 March 2017. These conditions are repeated below for reference: 1. An HIA report must be submitted to SAHRA upon the completion Report. of the walk down of the final layout prior to construction. The HIA must include the results of the walk down and must be submitted to SAHRA for comment prior to construction. No construction

activities may commence without comments from SAHRA;

during all phases of the project;

construction activities:

2. A Heritage Management Plan (HMP) must be compiled and submitted to SAHRA prior to the construction phase for approval.

3. Monitoring Reports of construction activities near ALE 4 and ALE

The HMP must include monitoring and reporting procedures

36 must be submitted to SAHRA upon completion of the

The comments / recommendations / requests which were submitted by SAHRA were duly noted and were forwarded to the applicant for consideration. These comments / recommendations / requests will be

Since the conditions provided in the Final Comment issued by SAHRA on 31 March 2017 still apply, the EMPr which was submitted with the FEIAr dated 20 January 2017 does not need to be updated to include these. The conditions provided in the Final Comment issued by SAHRA on 31 March 2017 were incorporated into the EMPr which was submitted with the FEIAr dated 20 January 2017. The Draft EMPr is provided in **Appendix D** of the Final EA Amendment Motivation

Please see below for details regarding how SAHRA's final comments have been addressed.

1. An HIA report will be submitted to SAHRA upon the completion of the walk down of the final layout prior to construction. The HIA will include the results of the walk down and will be submitted to SAHRA for comment prior to construction. No construction activities will commence without comments from SAHRA:

- 4. A no-go buffer zone of 30m must be adhered to around the identified burial grounds. The management of the burial grounds must be included in the HMP:
- 5. If it not be possible to retain the burial grounds in situ, a consultation process in terms of section 36 of the NHRA and Chapter XI of the NHRA Regulations must be undertaken. If, following the consultation process, grave relocation is found to feasible, a permit in terms of section 36 of the NHRA and Chapter IX of the NHRA Regulations must be applied for. Relocation of graves may only occur if SAHRA issues a permit for this purpose;
- The previous Palaeontological Desktop Study as referenced in Interim Comments issued on 18/01/2017 must be resubmitted to the case file for record keeping purposes. Reports that have been commented on should not be removed from the case file without the case officer permission;
- Proof of the submission of and receipt of all SAHRA comments to the Department of Environmental Affairs must be submitted to the case file;
- 8. If any evidence of archaeological sites or remains (e.g. remnants of stone-made structures, indigenous ceramics, bones, stone artefacts, ostrich eggshell fragments, charcoal and ash concentrations), fossils or other categories of heritage resources are found during the proposed development, SAHRA APM Unit (Natasha Higgitt/Phillip Hine 021 462 5402) must be alerted. If unmarked human burials are uncovered, the SAHRA Burial Grounds and Graves (BGG) Unit (Mimi Seetelo 012 320 8490), must be alerted immediately. A professional archaeologist or palaeontologist, depending on the nature of the finds, must be contracted as soon as possible to inspect the findings. If the newly discovered heritage resources prove to be of archaeological or palaeontological significance, a Phase 2 rescue operation may be required subject to permits issued by SAHRA; and
- 9. If the development receives an amended EA, SAHRA must be informed and all documents pertaining to the amended EA must be uploaded to the SAHRIS Case file.

- A Heritage Management Plan (HMP) will be compiled and submitted to SAHRA prior to the construction phase for approval.
 The HMP will include monitoring and reporting procedures during all phases of the project;
- Monitoring Reports of construction activities near ALE 4 and ALE 36 will be submitted to SAHRA upon completion of the construction activities;
- 4. A no-go buffer zone of 30m will be adhered to around the identified burial grounds. The management of the burial grounds will be included in the HMP;
- 5. If it not be possible to retain the burial grounds in situ, a consultation process in terms of section 36 of the NHRA and Chapter XI of the NHRA Regulations will be undertaken accordingly. If, following the consultation process, grave relocation is found to feasible, a permit in terms of section 36 of the NHRA and Chapter IX of the NHRA Regulations will be applied for. Relocation of graves will only occur if SAHRA issues a permit for this purpose;
- The previous Palaeontological Desktop Study as referenced in Interim Comments issued on 18/01/2017 was resubmitted to the case file for record keeping purposes as requested. Reports that were commented on were not removed from the case file without the case officer's permission;
- Proof of the submission of and receipt of all SAHRA comments to the DEA was submitted to the case file accordingly. In addition, proof of the submission of and receipt of any other SAHRA comments to the DEA will be submitted to the case file accordingly (if required);
- 8. If any evidence of archaeological sites or remains, fossils or other categories of heritage resources are found during the proposed development, SAHRA APM Unit will be alerted accordingly. If unmarked human burials are uncovered, the SAHRA Burial

WEF and the potential impact on the SKA project. We have considered
the proposed development, and conducted a basic high leve
assessment to determine the potential impact. We have concluded as
follows:
 Based on your technical studies and noting the
conclusions made in the report that you have made
available, we do not anticipate any negative impact or
the SKA;

(SARAO) Letter: 11 December 2018

completion.

Since SARAO has raised no objection to the proposed amendments, do not anticipate any negative impact on the SKA and the proposed amendments do not impact on the previously agreed path loss mitigation measures, the above-mentioned Path Loss and Electrical

Part 2 Amendment – Final Environmental Authorisation (EA) Amendment Motiva	tion Report	23
II. Based on our understanding of the proposed project,		Design Change Evaluation is deemed to be adequate and no further
the proposed modifications do not impact on the		assessments are required. In addition, as mentioned, the new
previously agreed path loss mitigation requirements		specifications are still in-line with the specialist assessments
and Emission Control for the AW125 TH 100A WTG		undertaken for the WEF and findings set out in the FEIAr dated 20
and we therefore, have no objections to the project at		January 2017 and will not result in any additional negative
this stage.		environmental impacts, over-and-above those already assessed in the
		FEIAr and authorised in the EA issued on 09 May 2017.
Any radio communication services and equipment located within the		
declared Karoo Central Astronomy Advantage Area shall be required		SARAO will however be included in all project related correspondence
to comply with the relevant regulations as promulgated.		and will also be provided an opportunity to comment on the Draft EA
		Amendment Motivation Report.
Please kindly find the attached SARAO letter and technical report.	Musa Baloye	Response from Hlengiwe Ntuli (SiVEST) via email on 05 July 2019
	South African Radio Astronomy	Good Day Musa,
	Observatory (SARAO)	
	Email: 05 July 2019	Thank you so much for your letter and technical report. All comments
		will be addressed accordingly.
TECHNICAL REPORT – Aletta Wind Energy Facility	Busang Sethole	The technical report provided by SARAO is attached in Appendix C4
1. INTRODUCTION	Spectrum and Telecoms	of the Final EA Amendment Motivation Report. SARAO's comments
BioTherm is the developer of the above mentioned wind energy facility	Analyst: South African Radio	have been duly noted and were forwarded to the applicant. In addition,
and was issued with an Environ-mental Authorisation (EA) for the	Astronomy Observatory	the letter to the developer which was attached to the technical report
proposed development in May 2017 following the conclusion of EIA	(SARAO)	was sent to the applicant for the manager to sign and return to SARAO,
process. The EA was based on the turbines hub height of 100m and	Technical Report via email: 05	as requested. Since SARAO has raised no objection to the proposed
the Acciona AW 125 TH 100A model. Because of the development to	July 2019	amendments, the amended Path Loss and Electrical Design Change
wind energy generation technology, the developer now seeks to		Evaluation (Appendix E) is deemed to be adequate and no further
amend the EA, in particular to change the turbines to Acciona AW		assessments are required. It is therefore advised that the Department
140/3465 TH 120.		authorise the amendments being requested.
Assessment of the impact on the SKA.		
2.1 The change in turbine model.		
The manufacturer of the turbine structure has provided a design		
change statement and confirmed that the turbines AW125/3000		
TH100 & AW140/3000 TH120 have identical electrical capabilities		
and the main difference between them are only structural.		
Í		
3. Conclusions and Recommendations		
5. 555.Maiorio dilla recommissidationo		

As it can be seen from figure 1 and figure 2, the increase in hub height does not significantly decrease the path loss between the wind energy facility and the SKA Infrastructure Territory. The path loss between the facility and SKA004 at 100m hub height is about 129 dB while at the hub height of 120m, the path loss is 127 dB. Assuming that the manufacturer's statement regarding similarity in electrical properties between the two types of turbine models, it can be concluded that the requested amendments to the EA increase will not significantly increase the risk of interference at the SKA.

It is recommended that the manager signs the attached letter to the developer of Aletta Wind Energy Facility.

Re: Development of Aletta Wind Energy Facility

This letter is in response to your application to amend an environmental authorisation for the proposed development of the Aletta wind energy facility near Copperton in the Northern Cape Province. We have considered the proposed amendment, in particular, the increase in the hub height from 100m to 120m and the impact this amendment will have on the SKA radio telescope.

SARAO has also undertaken a basic desktop study and came to the same conclusion as yourself that the proposed modification does not significantly change the path loss between the facility and the nearest SKA Infrastructure and as such it will not impact on the previously agreed path loss mitigation requirements and emission control.

This conclusion is based on the condition that the turbine model AW125/3000 TH100 and AW140/300 TH120 have identical electrical capabilities as stated in a statement from the manufacturer of the turbines.

Busang Sethole: Spectrum and Telecoms Analyst - South African Radio Astronomy Observatory (SARAO) Letter attached to Technical Report via email: 05 July The technical report provided by SARAO (to which this letter is attached) is attached in **Appendix C4** of the Final EA Amendment Motivation Report. SARAO's comments have been duly noted and were forwarded to the applicant. The applicant will ensure that SARAO are kept informed with the development of the project. Since SARAO has raised no objection to the proposed amendments, the amended Path Loss and Electrical Design Change Evaluation (**Appendix E**) is deemed to be adequate and no further assessments are required. It is therefore advised that the Department authorise the amendments being requested.

Based on the above, we do not have any objections to the proposed		
amendments at this stage and we would appreciate if we can be kept		
informed with the development of the project.		
Good Day	Siyathemba Local Municipality	Response from Hlengiwe Ntuli (SiVEST) via email on 10 July 2019
	Ernstine Louw	Good Day Ernstine,
I hereby would like to say that we as Siyathemba local Municipality	Email: 10 July 2019	
have no comments on the outcome of the assessments but we would		Thank you so much for your response, it is well received and noted.
like to say that we are satisfied with the outcomes and would like to		We will include it in the final report.
thank you.		



Appendix C6 **LANDOWNER AND AUTHORITY NOTIFICATIONS**

APPENDIX 4 LIST OF LAND OWNERS / NOTIFICATIONS

PORTION 1 AND 3 OF DRIELINGS PAN 101

Landowner:	Cornelius Jansen de Jager,	Cornelius Jansen de Jager, Executer of Estate Mrs Aletta de Jager				
Contact person:	Sandra De Jager					
Postal address:	P O BOX 233, PRIESKA	P O BOX 233, PRIESKA				
Postal code:	8940	Cell:	072 484 7131			
Telephone:	053 353 2546	Fax:	053 353 2546			
E-mail:	sandadej@gmail.com					

PORTION 2 AND THE REMAINDER OF DRIELINGS PAN 101

Landowner:	Aletta de Jager					
Contact person:	Sandra De Jager					
Postal address:	P O BOX 233, PRIESKA	P O BOX 233, PRIESKA				
Postal code:	8940	Cell:	072 484 7131			
Telephone:	053 353 2546	Fax:	053 353 2546			
E-mail:	sandadej@gmail.com	•				

sivest PPP

From: sivest_PPP

Sent: 08 April 2019 11:54 AM **To:** 'sandadej@gmail.com'

Cc: Andrea Gibb

Subject: 15499 Aletta Wind Energy Facility: EA Amendment Application Notification - LO

Importance: High

Tracking: Recipient Delivery

'sandadej@gmail.com'

Andrea Gibb Delivered: 2019/04/08 11:54 AM

Dear Mrs Sandra De Jager,

APPLICATION FOR AMENDMENT OF AN ENVIRONMENTAL AUTHORISATION (EA): PROPOSED CONSTRUCTION OF THE 140MW ALETTA WIND ENERGY FACILITY AND ASSOCAITED INFRASTRUCTURE NEAR COPPERTON, NORTHERN CAPE PROVINCEORIGINAL

DEA Reference Number: 14/12/16/3/3/2/945

The environmental authorisation (EA) issued by the Department of Environmental Affairs (DEA) on the 09th of May 2017, for the above mentioned project refer.

Biotherm Energy (Pty) Ltd, (hereafter referred to as 'Biotherm') are applying for a Part 1 Amendment of the EA (Reference: 14/12/16/3/3/2/945) for the above mentioned project to increase the authorised turbine dimensions to have a hub height of 120m and a rotor diameter of 140m. The proposed turbine dimensions are within the specifications assessed during the EIA process.

In light of the above, an application for the amendment of the EA will be submitted.

As an affected landowner (<u>Portion 1 and 3 of Drielings Pan 101</u> and <u>Portion 2 and the remainder of Drielings Pan 101</u>) we would like to inform you that the application for amendment of the EA will be submitted to the Department of Environmental Affairs (DEA) in accordance with the National Environmental Management Act, 1998 (NEMA) (Act No 107 of 1998) – EIA Regulations 2014 (as amended).

Please be advised that an electronic copy of the application for an amendment of the EA will be forwarded to you once it has been submitted to the DEA.

For further information, please contact SiVEST as follows:

Hlengiwe Ntuli

Kind Regards

PO BOX 2921, Rivonia, 2128 Tel – (011) 798 0600 Fax – (011) 803 7272

Email - <u>hlengiwen@sivest.co.za</u>

Andrea Gibb
Senior Manager
SiVEST Environmental Division



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Engineering Consulting | Project Management | Environmental Consulting | Town & Regional Planning | Management Systems Consulting

Durban | Johannesburg | Pretoria | Pietermaritzburg | Richards Bay | Port Louis (Mauritius)

sivest PPP

From: sivest_PPP

Sent: 08 April 2019 11:45 AM **To:** 'Thulani Mthombeni'

Cc: Andrea Gibb

Subject: 15499 Aletta Wind Energy Facility: EA Amendment Application Notification - PA

Importance: High

Tracking: Recipient Delivery

'Thulani Mthombeni'

Andrea Gibb Delivered: 2019/04/08 11:45 AM

Dear Mr Thulani Mthombeni.

APPLICATION FOR AMENDMENT OF AN ENVIRONMENTAL AUTHORISATION (EA): PROPOSED CONSTRUCTION OF THE 140MW ALETTA WIND ENERGY FACILITY AND ASSOCAITED INFRASTRUCTURE NEAR COPPERTON, NORTHERN CAPE PROVINCE

ORIGINAL DEA Reference Number: 14/12/16/3/3/2/945

The environmental authorisation (EA) issued by the Department of Environmental Affairs (DEA) on the 09th of May 2017, for the above mentioned project refer.

Biotherm Energy (Pty) Ltd, (hereafter referred to as 'Biotherm') are applying for a Part 1 Amendment of the EA (Reference: 14/12/16/3/3/2/945) for the above mentioned project to increase the authorised turbine dimensions to have a hub height of 120m and a rotor diameter of 140m. The proposed turbine dimensions are within the specifications assessed during the EIA process.

In light of the above, an application for the amendment of the EA will be submitted.

As the provincial commenting authority (Northern Cape Department of Environment and Nature Conservation (NC DENC) we would like to inform you that the application for amendment of the EA will be submitted to the Department of Environmental Affairs (DEA) in accordance with the National Environmental Management Act, 1998 (NEMA) (Act No 107 of 1998) – EIA Regulations 2014 (as amended).

Please be advised that an electronic copy of the application for an amendment of the EA will be forwarded to you once it has been submitted to the DEA.

For further information, please contact SiVEST as follows:

Hlengiwe Ntuli PO BOX 2921, Rivonia, 2128 Tel – (011) 798 0600 Fax – (011) 803 7272

Email - hlengiwen@sivest.co.za

Kind Regards
Andrea Gibb
Senior Manager
SiVEST Environmental Division



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Engineering Consulting | Project Management | Environmental Consulting | Town & Regional Planning | Management Systems Consulting

Durban | Johannesburg | Pretoria | Pietermaritzburg | Richards Bay | Port Louis (Mauritius)

sivest_PPP

From:Microsoft OutlookTo:'sandadej@gmail.com'Sent:08 April 2019 11:54 AM

Subject: Relayed: 15499 Aletta Wind Energy Facility: EA Amendment Application Notification - LO

Delivery to these recipients or groups is complete, but no delivery notification was sent by the destination server:

'sandadej@gmail.com' (sandadej@gmail.com) <mailto:sandadej@gmail.com>

Subject: 15499 Aletta Wind Energy Facility: EA Amendment Application Notification - LO

sivest_PPP

From: Microsoft Outlook

To: 'Thulani Mthombeni'

Sent: 08 April 2019 11:45 AM

Subject: Relayed: 15499 Aletta Wind Energy Facility: EA Amendment Application Notification - PA

Delivery to these recipients or groups is complete, but no delivery notification was sent by the destination server:

 $'Thulani\ Mthombeni @ncpg.gov.za) < mailto: TMthombeni @ncpg.gov.za > \\$

Subject: 15499 Aletta Wind Energy Facility: EA Amendment Application Notification - PA

sivest PPP

From: sivest_PPP

Sent: 12 April 2019 09:32 AM **To:** 'sandadej@gmail.com'

Cc: Andrea Gibb

Subject: RE: 15499 Aletta Wind Energy Facility: EA Amendment Application Notification - LO

Importance: High

Tracking: Recipient Delivery

'sandadej@gmail.com'

Andrea Gibb Delivered: 2019/04/12 09:32 AM

Dear Mrs Sandra De Jager,

Please find attached copy of the EA Amendment Application form that was delivered to the DEA on the 11th April 2019.



For further information, please contact SiVEST as follows:

Hlengiwe NtuliPO BOX 2921, Rivonia, 2128
Tel – (011) 798 0600

Fax – (011) 803 7272 Email – hlengiwen@sivest.co.za

Kind Regards
Andrea Gibb
Senior Manager
SiVEST Environmental Division





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Engineering Consulting | Project Management | Environmental Consulting | Town & Regional Planning | Management Systems Consulting Durban | Johannesburg | Pretoria | Pietermaritzburg | Richards Bay | Port Louis (Mauritius)

From: sivest_PPP

Sent: 08 April 2019 11:54 AM

To: 'sandadej@gmail.com' <sandadej@gmail.com>

Cc: Andrea Gibb < Andrea G@sivest.co.za>

Subject: 15499 Aletta Wind Energy Facility: EA Amendment Application Notification - LO

Importance: High

Dear Mrs Sandra De Jager,

APPLICATION FOR AMENDMENT OF AN ENVIRONMENTAL AUTHORISATION (EA): PROPOSED CONSTRUCTION OF THE 140MW ALETTA WIND ENERGY FACILITY AND ASSOCAITED INFRASTRUCTURE NEAR COPPERTON, NORTHERN CAPE PROVINCEORIGINAL

■ DEA Reference Number: 14/12/16/3/3/2/945

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Please be advised that an electronic copy of the application for an amendment of the EA will be forwarded to you once it has been submitted to the DEA.

For further information, please contact SiVEST as follows:

Hlengiwe Ntuli

PO BOX 2921, Rivonia, 2128 Tel – (011) 798 0600 Fax – (011) 803 7272 Email – hlengiwen@sivest.co.za

Kind Regards
Andrea Gibb

1

Senior Manager

SiVEST Environmental Division

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sivest_PPP

From: sivest_PPP

Sent: 12 April 2019 09:31 AM

To: 'Thulani Mthombeni'

Cc: Andrea Gibb

Subject: RE: 15499 Aletta Wind Energy Facility: EA Amendment Application Notification - PA

Importance: High

Tracking: Recipient Delivery

'Thulani Mthombeni'

Andrea Gibb Delivered: 2019/04/12 09:31 AM

Dear Mr Thulani Mthombeni.

Please find attached copy of the EA Amendment Application form that was delivered to the DEA on the 11th April 2019.



For further information, please contact SiVEST as follows:

Hlengiwe Ntuli PO BOX 2921, Rivonia, 2128 Tel – (011) 798 0600 Fax – (011) 803 7272

Email - hlengiwen@sivest.co.za

From: sivest_PPP

Sent: 08 April 2019 11:45 AM

To: 'Thulani Mthombeni' <TMthombeni@ncpg.gov.za>

Cc: Andrea Gibb < Andrea G@sivest.co.za>

Subject: 15499 Aletta Wind Energy Facility: EA Amendment Application Notification - PA

Importance: High

Dear Mr Thulani Mthombeni,

APPLICATION FOR AMENDMENT OF AN ENVIRONMENTAL AUTHORISATION (EA): PROPOSED CONSTRUCTION OF THE 140MW ALETTA WIND ENERGY FACILITY AND ASSOCAITED INFRASTRUCTURE NEAR COPPERTON, NORTHERN CAPE PROVINCE

ORIGINAL DEA Reference Number: 14/12/16/3/3/2/945

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In light of the above, an application for the amendment of the EA will be submitted.

As the provincial commenting authority (Northern Cape Department of Environment and Nature Conservation (NC DENC) we would like to inform you that the application for amendment of the EA will be submitted to the Department of Environmental Affairs (DEA) in accordance with the National Environmental Management Act, 1998 (NEMA) (Act No 107 of 1998) – EIA Regulations 2014 (as amended).

Please be advised that an electronic copy of the application for an amendment of the EA will be forwarded to you once it has been submitted to the DEA.

For further information, please contact SiVEST as follows:

Hlengiwe Ntuli

PO BOX 2921, Rivonia, 2128 Tel – (011) 798 0600 Fax – (011) 803 7272 Email – <u>hlengiwen@sivest.co.za</u>

Email – <u>niengiwen@sivest.co.</u>2

Kind Regards Andrea Gibb Senior Manager

SiVEST Environmental Division

<< OLE Object: Picture (Device Independent Bitmap) >>

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Appendix C7 **DISTRIBUTION TO ORGANS OF STATE (OoS)**

TITLE	SURNAME	NAME	POSITION	POSTAL ADDRESS	EMAIL ADDRESS	REPORT DISTRIBUTION	RESPONSE / RECEIPT OF COMMENTS
SIYATHE	MBA LOCAL MUNI	CIPALITY		•		<u>'</u>	
Mr	Basson	Jakob	LED Manager	PO Box 16 PRIESKA 8940	jakob@siyathemba.gov.za		Access to an electronic copy of the report was emailed and posted on 03 June 2019. An email reminder was sent on the 03 July 2019. SiVEST contacted the
Ms	Louw	Ernstine	Environmental Health Practitioner	PO Box 16 PRIESKA 8940	ernstinelouw@gmail.com	Electronic copy on CD emailed and posted - 03 June 2019	municipality and Ms Louw confirmed that there are no comments from the Local Municipality.
PIXLEY I	CA SEME DISTRICT N	MUNICIPALITY	•			•	
Mr	Nkondeshe	Sonwabile	Senior Environmental Officer	Private Bag X1012 DE AAR 7000	snkondeshe@environment.gov.za	1	Access to an electronic copy of the report was emailed and posted on 03 June 2019. An email reminder was sent on the 03 July 2019. SiVEST contacted the municipality and Mr Nkondeshe confirmed that there
Mr	Madyo	Sindisile	LED Manager	Private Bag X1012 DE AAR 7000	excellentsolutions@live.co.za	Electronic copy on CD emailed and posted - 03 June 2019	are no comments from the District Municipality.
DEPART	MENT OF ENVIRON	IMENTAL AFFAIR	RS BIODIVERSITY				
Mr	Lekota	Seoka		Private Bag X447 Pretoria 0001	slekota@environment.gov.za		Access to an electronic copy of the report was emailed and posted on 03 June 2019. An email reminder was sent on the 03 July 2019. SiVEST contacted the department and Mr Tshitwamulomoni requested that
Mr	Rabothata	Mmatlala		Private Bag X447 Pretoria 0001	slekotamrabothata@environment.gov.za	Electronic copy on CD emailed and posted - 03 June 2019	we email the electronic copy again and he will revert back.
AGRI SA	A-NORTHERN CAPE					•	
Mr	Myburg	Henning	General Manager	PO Box 1094 KIMBERLEY 8300	henning@agrink.co.za	- 03 June 2019	Access to an electronic copy of the report was emailed and posted on 03 June 2019. An email reminder was sent on the 03 July 2019. SiVEST contacted the municipality and Mr Myburg confirmed that there are no comments from the department.
DEPART	 MENT OF WATER A	ND SANITATION					
Ms	Mokhoantle	Lerato	Environmental Officer	28 Central road Beaconsfield Kimberley 8300	Mokhoantlel@dws.gov.za	- 03 June 2019	Access to an electronic copy of the report was emailed and posted on 03 June 2019. An email reminder was sent on the 03 July 2019. Attempts were made to contact Ms Mokhoantle telephonically to no avail. Any
Mr	Mahunonyane	Moses	Director: Institutional Establishment	Private Bag X6101 KIMBERLEY 8300	MahunonyaneM@dws.gov.za	- 03 June 2019	comments received from the DWS after submission of the EA Amendment Report will be forwarded to the DEA.
NORTH	 ERN CAPE DEPARTM	L MENT OF AGRICU	 LTURE, LAND REFORM & RURA	L DEVELOPMENT			

TITLE	SURNAME	NAME	POSITION	POSTAL ADDRESS	EMAIL ADDRESS	REPORT DISTRIBUTION	RESPONSE / RECEIPT OF COMMENTS
Mr	Cloete	Alexander		P.O.Box 65 Calvinia 8190	acloete@ncpg.gov.za	Electronic copy on CD emailed and posted - 03 June 2019	Access to an electronic copy of the report was emailed and posted on 03 June 2019. An email reminder was sent on the 03 July 2019. Attempts were made to contact Mr Cloete telephonically to no avail. Any comments received from the NC Dept Agri, Land Reform & Rural Dev after submission of the EA Amendment Report will be forwarded to the DEA.
DEPART	MENT OF AGRICUL	TURE, FORESTRY	/ AND FISHERIES				
Northe	n Cape Department	t					
Ms	Mans	Jacoline	Chief Forester	Koelenhof 306 Schroder Street UPINGTON 8800	jacolinema@daff.gov.za	Electronic copy on CD emailed and posted - 03 June 2019	Access to an electronic copy of the report was emailed and posted on 03 June 2019. An email reminder was sent on the 03 July 2019. Attempts were made to contact Ms Mann telephonically to no avail. Any comments received from the NC DAFF after submission of the EA Amendment Report will be forwarded to the DEA.
Provinc	ial Department	1	1	1			
Ms	Marubini	Mashudu	Delegate of the Minister	Private Bag X120 PRETORIA 0001	MashuduM@daff.gov.co.za	Electronic copy on CD emailed and posted - 03 June 2019	Access to an electronic copy of the report was emailed and posted on 03 June 2019. An email reminder was sent on the 03 July 2019. Attempts were made to
Mrs	Buthelezi	Thoko	Directorate Land Use and Soil Management	Private Bag X120 PRETORIA 0001	ThokoB@daff.gov.za	Electronic copy on CD emailed and posted - 03 June 2019	contact Ms Buthelezi and Ms Mashudu telephonically to no avail. I was put through to Khuthala who said she will follow up and revert back. Any comments received from DAFF after submission of the EA Amendment Report will be forwarded to the DEA.
DEPART	MENT OF MINERAL	RESOURCES (D	MR)	•			
Mr	Ravhogoni	Ntsundeni	Regional Manager	Private Bag x6093 KIMBERLEY 8300	Ntsundeni.Ravhogoni@dmr.gov.za	Electronic copy on CD emailed and posted - 03 June 2019	Access to an electronic copy of the report was emailed and posted on 03 June 2019. An email reminder was sent on the 03 July 2019. Attempts were made to contact Mr Ravhogoni telephonically to no avail. Any comments received from DMR after submission of the EA Amendment Report will be forwarded to the DEA.

			DISTI	ADDITION OF THE DRAFT LA AL	VIENDIVIENT WIGHTVATION REPORT TO ORGAN	IS OF STATE FOR COMMENT	
TITLE	SURNAME	NAME	POSITION	POSTAL ADDRESS	EMAIL ADDRESS	REPORT DISTRIBUTION	RESPONSE / RECEIPT OF COMMENTS
NORTHE	ERN CAPE DEPT OF I	ENVIRONMENT A	AND NATURE CONSERVATION				
Mr	Fisher	Brian	1	Private Bag X86102 KIMBERLEY 8300	bfisher@ncpg.gov.za	Electronic copy on CD emailed and posted - 03 June 2019	Access to an electronic copy of the report was emailed and posted on 03 June 2019. An email reminder was sent on the 03 July 2019. Attempts were made to
Mr	Mthombeni	Thulani		Private Bag X86102 KIMBERLEY 8300	tmthombeni@ncpg.gov.za	Electronic copy on CD emailed and posted - 03 June 2019	contact Mr Fisher and Mr Mthombeni telephonically to no avail. Any comments received from DAFF after submission of the EA Amendment Report will be forwarded to the DEA.
NORTHE	RN CAPE DEPT OF	SPORT, ARTS & C	CULTURE: Heritage Resources Un	it			
Mr	Lenyibi	Patrick		Private Bag X5004 KIMBERLEY 8300	plenyibi@ncpg.gov.za	1	Access to an electronic copy of the report was emailed and posted on 03 June 2019. An email reminder was sent on the 03 July 2019. Attempts were made to contact Mr Lenyibi telephonically and he has promised to follow up and revert back. Any comments received from NC Dept Sport, Arts & Culture after submission of the EA Amendment Report will be forwarded to the DEA.

			-		MENDIMENT MOTIVATION REPORT TO ORGAN		
TITLE	SURNAME	NAME	POSITION	POSTAL ADDRESS	EMAIL ADDRESS	REPORT DISTRIBUTION	RESPONSE / RECEIPT OF COMMENTS
SANRAI							
Ms	Abrahams	Nicole	Environmental Coordinator	Private Bag X19 BELLVILLE 7535	abrahamsn@nra.co.za	Electronic copy on CD emailed and posted - 03 June 2019	Access to an electronic copy of the report was emailed and posted on 03 June 2019. An email reminder was sent on the 03 July 2019. Attempts were made to contact Ms Abrahams telephonically but she was in a meeting. Any comments received from NC Dept Sport, Arts & Culture after submission of the EA Amendment Report will be forwarded to the DEA.
NORTH	ERN CAPE DEPARTIV	IENT OF ROADS	AND PUBLIC WORKS				
Mr	Roelofse	Jaco	Director: Planning & Design	PO Box 3132 Kimberley 8300	roelofse.j@vodamail.co.za	- 03 June 2019	Access to an electronic copy of the report was emailed and posted on 03 June 2019. An email reminder was sent on the 03 July 2019. Comments from the NC DR & PW received on 05 July 2019.
SAHRA:	HEAD OFFICE	•					
Ms	Higgitt		Heritage Officer: Northern Cape	PO Box 4637 CAPE TOWN 8000	nhiggitt@sahra.org.za	Uploaded to the SAHRIS Website on 05 June 2019	Access to an electronic copy of the report was emailed and posted on 03 June 2019. An email reminder was sent on the 03 July 2019. Comments from the SAHRA received on 28 June 2019.
ESKOM							
Mr	Geeringh	John	Chief Planner	PO Box 1091 JOHANNESBURG 2000	GeerinJH@eskom.co.za	Electronic copy on CD emailed and posted - 03 June 2019	Access to an electronic copy of the report was emailed and posted on 03 June 2019. An email reminder was sent on the 03 July 2019. Comments from ESKOM received on 10 June 2019.
SQUAR	E KILOMETRE ARRAY	Y				•	
Dr	Tiplady	Adriaan	Manager: Site Categorisation	PO Box 522 SAXONWOLD 2132	atiplady@ska.ac.za	Electronic copy on CD emailed and posted - 03 June 2019	Comments with regards to the Square Kilometer Array (SKA) were sought from the South African Radio Astronomy Observatory (SARAO), as this organisation is responsible for managing all radio astronomy initiatives and facilities in South Africa. They were contacted via telephone on 11 July 2019 in order to confirm this.
SA CIVI	L AVIATION AUTHOR	RITY (SA CAA)					

					MENSIMENT MOTIVATION REPORT TO ORGAN		
TITLE	SURNAME	NAME	POSITION	POSTAL ADDRESS	EMAIL ADDRESS	REPORT DISTRIBUTION	RESPONSE / RECEIPT OF COMMENTS
Ms	Stroh	Lizell	·	Private Bag X73 HALFWAY HOUSE 1685	strohl@caa.co.za	- 03 June 2019	Access to an electronic copy of the report was emailed and posted on 03 June 2019. An email reminder was sent on the 03 July 2019. Attempts were made to contact Ms Stroh telephonicallyto no avail. Any comments received from NC Dept Sport, Arts & Culture after submission of the EA Amendment Report will be forwarded to the DEA.
AIR TRA	FFIC AND NAVIGAT	ION SERVICES (A	ATNS)				
Ms	Morobane	Johanna	Manager: Corporate Sustainability and Environment	Private Bag X15 KEMPTON PARK 1620	JohannaM@atns.co.za	- 03 June 2019	Access to an electronic copy of the report was emailed and posted on 03 June 2019. An email reminder was sent on the 03 July 2019. Comments from ATNS
Ms	Masilela	Simphiwe	Obstacle Evaluator	Private Bag X15 KEMPTON PARK 1620	obstacles@atns.co.za SimphiweM@atns.co.za	Electronic copy on CD emailed and posted - 03 June 2019	received on 05 July 2019.
TRANSI	IET FREIGHT RAIL						
Mr	Fiff	Sam	Freight Rail	PO Box 255 BLOEMFONTEIN 9300	sam.fiff@transnet.net	- 03 June 2019	Access to an electronic copy of the report was emailed and posted on 03 June 2019. An email reminder was sent on the 03 July 2019. Attempts were made to contact Mr Fiff telephonically to no avail. Any comments received from the DWS after submission of the EA Amendment Report will be forwarded to the DEA

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TITLE	SURNAME	NAME	POSITION	POSTAL ADDRESS	EMAIL ADDRESS	REPORT DISTRIBUTION	RESPONSE / RECEIPT OF COMMENTS
SENTEC	H					<u> </u>	
Mr	Koegelenberg	Johan	Renewable Projects	Private Bag X06 Honeydew 2040	koegelenbergj@sentech.co.za	- 03 June 2019	Access to an electronic copy of the report was emailed and posted on 03 June 2019. An email reminder was sent on the 03 July 2019. Comments from SENTECH received on 19 June 2019.
SARAO	•					<u> </u>	
Mr	Matlhane	Selaelo	Spectrum & Telecommunication Manager		smatlhane@ska.ac.za	- 03 June 2019	Access to an electronic copy of the report was emailed and posted on 03 June 2019. An email reminder was sent on the 03 July 2019. Comments from SARAO received on 05 July 2019.
TELKON	1	,					
Ms	Spammer	Candice		10 Jan Smuts Drive Pinelands CAPE TOWN 7404	SpammerC1@telkom.co.za	I	Access to an electronic copy of the report was emailed and posted on 03 June 2019. An email reminder was sent on the 03 July 2019. Attempts were made to
Ms	Peters	Ihlaam		10 Jan Smuts Drive Pinelands CAPE TOWN 7404	ihlaamp@telkom.co.za	- 03 June 2019	contact Ms Spammer and Ms Peters telephonically to no avail. Any comments received from Telkom after submission of the EA Amendment Report will be forwarded to the DEA.
ENDAN	GERED WILDLIFE TR	UST					
Mr	Leeuwner	Lourens	Renewable Energy Project Manager	Private Bag X11, Modderfontein, 1609, Johannesburg	lourensl@ewt.org.za	- 03 June 2019	Access to an electronic copy of the report was emailed and posted on 03 June 2019. An email reminder was sent on the 03 July 2019. Attempts were made to contact Mr Leeuwner telephonically to no avail. Any comments received from the DWS after submission of the EA Amendment Report will be forwarded to the DEA
WESSA							
Mr	Griffiths	Morgan	Environmental Governance Programme Manager	PO Box 12444, Centrahil, Port Elizabeth, 6006, South Africa	morgan.griffiths@wessa.co.za	- 03 June 2019	Access to an electronic copy of the report was emailed and posted on 03 June 2019. An email reminder was sent on the 03 July 2019. Attempts were made to contact Mr Griffiths telephonically to no avail. Any comments received from WESSA after submission of the EA Amendment Report will be forwarded to the DEA.
BIRDLIF	E SOUTH AFRICA	,		•		1	

TITLE	SURNAME	NAME	POSITION	POSTAL ADDRESS	EMAIL ADDRESS	REPORT DISTRIBUTION	RESPONSE / RECEIPT OF COMMENTS
Ms	Ralston	Samantha	Manager	PO Box 515 RANDBURG 2125		- 03 June 2019	Access to an electronic copy of the report was emailed and posted on 03 June 2019. An email reminder was sent on the 03 July 2019. Attempts were made to contact Ms Ralston and Ms Stevens telephonically to no avail. Mr Booths has however promised to look into the report and revert back. He did mention that if
Ms	Stevens	Candice	, 0	PO Box 515 RANDBURG 2125		Electronic copy on CD emailed and posted - 03 June 2019	we do not receive any response to assume that there are no comments from BirdLife. Any comments received from BirdLife after submission of the EA Amendment Report will be forwarded to the DEA.

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Œ	MLSIMUSICE MMD40 Mr Sonwabile Nkondeshe Director: Environmental Managemer Pixley Ka Seme District Municipality Private Bag X1012 DE AAR 7000	O 3 JUN 2019 Tracking Number:
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	Mr Henning Myburg General Manager Agri SA: Northern Cape PO Box 1094 KIMBERLEY	0 3 JUN 2019
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OOS DISTRIBUTION OF EA AMENDMENT MOTIVATION REPORT Project Number: Trace and Track Parcel (CD) **Registered Letter** 15499 Fast Mail X Post Office Stamp: Addressed To: MR MOSES MAHUNONYANG. Ms Lerato Mokhoantle **Environmental Officer** Department of Water & Sanitation Private Bag X6101 Tracking Number: **KIMBERLEY** 8300 Project Number: Trace and Track Parcel (CD) **Registered Letter** 15499 **Fast Mail** X Post Office Stamp: Addressed To: Mr Alexander Cloete NC Department of Agriculture, Land Re PO Box 65 CALVINIA 0 3 JUN 2019 8190 Tracking Number: Project Number: Trace and Track Parcel (CD) **Registered Letter** 15499 **Fast Mail** Post Office Stamp: Addressed To: Mr Ntsundeni Ravhogoni Northern Cape: Acting Regional Mana-Department of Mineral Resources (DM

Tracking Number:

Private Bag x6093 KIMBERLEY

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	Ms Jacoline Mans Chief Forester Department of Agriculture, Forestry & F PO Box 2782 UPINGTON	0 3 JUN 2019 2 1 2 3 Tracking Number:
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	sed To:	Post Office Stamp:
	MS THO PO BATHLEECT Ms Mashudu Marubini Delegate of the Minister DAFF Provinical Department Private Bag X120 PRETORIA 0001	O 3 JUN 2019 Tracking Number: 2123
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	MR THULANI MTHOMBINI Mr Brian Fisher Director of Environmental Impact Mana	0 3 JUN 2015
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	Dept of Environment and Nature Conservate bag x6102 KIMBERLEY	Tracking Number:

OOS DISTRIBUTION OF EA AMENDMENT MOTIVATION REPORT Project Number: Trace and Track Parcel (CD) **Registered Letter** 15499 **Fast Mail** X Post Office Stamp: Addressed To: Ms Nicole Abrahams **Environmental Coordinator** SANRAL Private Bag X19 BELLVILLE 7535 Tracking Number: Project Number: Trace and Track Parcel (CD) **Registered Letter** 15499 Fast Mail X Post Office Stamp: Addressed To: Mr Jaco Roelofse Director: Planning & Design efc NC Department of Roads & Public Wo-PO Box 3132 **KIMBERLEY** Tracking Number: 8300 Project Number: Trace and Track Parcel (CD) **Registered Letter** 15499 **Fast Mail** Post Office Stamp: Addressed To: Mr John Geeringh Chief Planner Eskom: Transmission PO Box 1091 **JOHANNESBURG** 2000 Tracking Number:

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	Ms Johanna Morobane	0 3 JUN 2019
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-	Mr Sam Fiff	- (2)
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Addre	Ms Lizell Stroh Obstacle Specialist SA Civil Aviation Authority Private Bag X73 HALFWAY HOUSE	Post Office Stamp: 0 3 JUN 2019
		Tracking Number 220

х	Trace and Track Parcel (CD) Registered Letter Fast Mail	Project Number: 15499
Addres	Mr Selaelo Matlhane Spectrum & Telecommunication Manay South African Radio Astronomy Observatory 17 Baker Street Rosebank JOHANNESBURG 2196	Post Office Stamp: 0 3 JUN 2019 Tracking Number:

OOS DISTRIBUTION OF EA AMENDMENT MOTIVATION REPORT Trace and Track Parcel (CD) Project Number: **Registered Letter** 15499 Fast Mail X Post Office Stamp: Addressed To: Ms Samantha Ralston-Paton Manager BirdLife South Africa Biodiversity Conservation Kirstenbos Room A8, Newlands CAPE TOWN Tracking Number: 7700 Trace and Track Parcel (CD) Project Number: **Registered Letter** 15499 Fast Mail X Addressed To: Post Office Stamp: Mr Lourens Leeuwner Renewable Energy Project Manager 86 Capricorn Drive, Capricorn Business Park, Muizenberg Tracking Number: CAPE TOWN Trace and Track Parcel (CD) Project Number: **Registered Letter** 15499 X Fast Mail Addressed To: Post Office Stamp: Mr Morgan Griffiths Conservation Officer WESSA: National PORT ELIZABETH 6006 Tracking Number:

X	Trace and Track Parcel (CD) Registered Letter Fast Mail	Project Number: 15499
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	Trace and Track Parcel (CD) Registered Letter	Project Number:

х	Trace and Track Parcel (CD) Registered Letter Fast Mail	Project Number: 15499
Addre	MS (HLAMAN PETERS) Ms Candice Spammer Telkom Wayleave 10 Jan Smuts Drive Pinelands CAPE TOWN 7404	Post Office Stamp: 0 3 JUN 2019 Tracking Number:

х	Trace and Track Parcel (CD) Registered Letter Fast Mail	Project Number: 15499
Addres	Mr Seoka Lekota Department of Environmental Affairs Private Bag X447 PRETORIA 0001	Post Office Stamp: Tracking Number:

sivest_PPP From:

Sent: 03 June 2019 03:18 PM

To: Andrea Gibb; Stephan Jacobs; Hlengiwe Ntuli; 'Sandhisha Narain'

Andrea Gibb

'Henning Myburg' 'Simphiwe Masilela' 'Johanna Morobane' 'Samantha Ralston-Paton' 'Mashudu Marubini' 'Jacoline Mans' 'Mmatlala Rabothata'

'Seoka Lekota'

'Patrick Lenyibi'

'Brian Fisher'

'John Geeringh' 'Lourens Leeuwner' 'Alexander Cloete' 'Jaco Roelofse' 'Thulani Mthombeni' 'Sonwabile Nkondeshe'

'Lizell Stroh'

'Sam Fiff'

'Piet Papier' 'Henning Myburg' 'Graham Mondzinger' 'Simphiwe Masilela' 'Johanna Morobane' 'Samantha Ralston-Paton'

'Morgan Griffiths'

'Candice Stevens' 'Mashudu Marubini' 'Jacoline Mans' 'Hettie Buys'

'Mmatlala Rabothata'

'Ntsundeni Ravhogoni'

'Sonwabile Nkondeshe'

'Seoka Lekota'

'Patrick Lenyibi' 'Moses Mahunonyane' 'Lerato Mokhoantle' 'Thoko Buthelezi' 'Brian Fisher'

'Nicole Abrahams' 'Johan Koegelenberg' 'Olwethu Tshekela' 'Jakob Basson' 'Natasha Higgitt' 'Selaelo Matlhane' 'Adriaan Tiplady' 'Ihlaam Peters' 'Candice Spammer'

'Ntsundeni Ravhogoni'

'Moses Mahunonyane' 'Lerato Mokhoantle'

'Sonwabile Nkondeshe'

Cc: 'Henning Myburg'; 'Simphiwe Masilela'; 'Johanna Morobane'; 'Samantha Ralston-Paton'; 'Mashudu Marubini'; 'Jacoline Mans'; 'Mmatlala Rabothata'; 'Seoka Lekota'; 'Ntsundeni Ravhogoni'; 'Patrick Lenyibi'; 'Moses Mahunonyane'; 'Lerato Mokhoantle'; 'Brian Fisher'; 'Sonwabile Nkondeshe'; 'John Geeringh'; 'Lourens Leeuwner'; 'Alexander Cloete'; 'Jaco Roelofse'; 'Thulani Mthombeni'; 'Sonwabile Nkondeshe'; 'Lizell Stroh'; 'Nicole Abrahams'; 'Johan Koegelenberg'; 'Olwethu Tshekela'; 'Jakob Basson'; 'Natasha Higgitt'; 'Selaelo Matlhane'; 'Adriaan Tiplady';

Delivered: 2019/06/03 03:18 PM

Read: 2019/06/03 03:24 PM

Read: 2019/06/03 06:38 PM

'Ihlaam Peters'; 'Candice Spammer'; 'Sam Fiff'; 'Morgan Griffiths'

Aletta WEF Amendment: Draft EA Amendment Motivation Report Comment Period Starting **Subject:**

Recipient Delivery Read Tracking:

> Stephan Jacobs Delivered: 2019/06/03 03:18 PM Hlengiwe Ntuli

Delivered: 2019/06/03 03:18 PM

'Sandhisha Narain'

Recipient Delivery Read 'John Geeringh' 'Lourens Leeuwner' 'Alexander Cloete' 'Jaco Roelofse 'Onwabile Ndzumo' 'Isaac Gwija' 'Thulani Mthombeni' 'Mashudu Mukoma' 'Sonwabile Nkondeshe' 'Lizell Stroh' 'Phillip Hine' 'Nicole Abrahams' 'Imelda Julies' 'Garth Julius' 'Johan Koegelenberg' 'Giel MacDonald' 'Betty Titus' 'Elizabeth Martin' 'F M Van Wyk' 'Gloria Speelman' 'Jane Molepo' 'IWJ Stadhouer' 'Olwethu Tshekela 'Gregory MacKay' 'Jakob Basson' 'Natasha Higgitt' 'Selaelo Matlhane' 'Adriaan Tiplady' 'Heleen van den Heever' 'Amanda Bester' 'Ihlaam Peters' 'Candice Spammer' 'Sam Fiff' 'Morgan Griffiths' 'Mpho Sebole' 'kmotlhomi@ncpg.gov.za' 'ruth.cuttings@yahoo.com'

Dear Stakeholder,

APPLICATION TO AMEND AN ENVIRONMNETAL AUTHORISATION FOR THE PROPOSED DEVELOPMENT OF THE ALETTA 140MW WIND ENERGY FACILITY (WEF) NEAR COPPERTON, NORTHERN CAPE PROVINCE

DEA Ref. No.:14/12/16/3/3/2/945/AM1

'mr.gwija@gmail.com'

'molepojane.mp@gmail.com'

Please note that SiVEST SA (Pty) Ltd has been appointed by BioTherm Energy (Pty) Ltd (hereafter referred to as BioTherm) as the independent Environmental Assessment Practitioner (EAP) for the abovementioned project to apply for an Amendment of the Environmental Authorisation (EA) (Reference: 14/12/16/3/3/2/945/AM1).

BioTherm was issued with an EA for the proposed development of the 140MW Aletta Wind Energy Facility (WEF) and its associated infrastructure near Copperton in the Northern Cape Province on 9 May 2017 (DEA Reference 14/12/16/3/3/2/945).

The amendment to the EA is required to increase the authorised turbine dimensions to have a hub height of 120m, a rotor diameter of 140m and a generation output of 3.465MW each. The proposed turbine dimensions are within the specifications assessed during the EIA process. The application for an amendment of the EA was received by the Department of Environmental Affairs (DEA) on 11 April 2019. Following a review of the application for an amendment of the EA, the DEA concluded that the application falls within the ambit of amendments applied for in terms of Part 2 of Chapter 5 of the EIA Regulations, 2014 (as amended) and therefore a report needs to be made available to all interested and affected parties (I&APs) and relevant organs of state.

We would like to take this opportunity to inform you that, in accordance with the National Environmental Management Act, 1998 (Act No. 107 of 1998) (NEMA) (as amended) and the Environmental Impact Assessment (EIA) Regulations, 2014 (as amended), the Draft EA Amendment Motivation Report will be available for public review as from **Monday 3 June 2019 to Friday 5 July 2019** (end of business day).

The Draft EA Amendment Motivation Report as well as the accompanying appendices are available on SiVEST's website (http://www.sivest.co.za/, click on Downloads, then browse to the folder '15499 Aletta WEF Amendment'), and an electronic copy (on CD) has been sent to you. We kindly request that you submit your comments to the Public Participation Office at the below details, on or before Friday the 5th of July 2019 (before end of business day). SiVEST will forward any comments received after the public comment and review period directly to the relevant case officer at the Department of Environmental Affairs (DEA).

Stephan Jacobs or Hlengiwe Ntuli PO BOX 2921, Rivonia, 2128 Tel – (011) 798 0600 Fax – (011) 803 7272 Email – sivest_ppp@sivest.co.za We would like to thank you in anticipation of your active and meaningful contribution to the Amendment and Public Participation process.

Kind Regards

Andrea Gibb

Senior Manager

SiVEST Environmental Division





SiVEST is a Level 3 BBBEE Contributor

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Department of Environmental Affairs **Environment House** 473 Steve Biko Arcadia **PRETORIA** 0083

14/12/16/3/3/2/945/AM1 Your reference:

15499 - Aletta Our reference:

> Date: 03 June 2019

ATTENTION: CHIEF DIRECTOR - INTEGRATED **AUTHORISATION**

Dear Sir/Madam,

APPLICATION TO AMEND AN ENVIRONMNETAL AUTHORISATION FOR THE PROPOSED DEVELOPMENT OF THE ALETTA 140MW WIND ENERGY FACILITY (WEF) NEAR COPPERTON, NORTHERN CAPE PROVINCE

DEA Ref. No.:14/12/16/3/3/2/945/AM1

Please note that SiVEST SA (Pty) Ltd has been appointed by BioTherm Energy (Pty) Ltd (hereafter referred to as BioTherm) as the independent Environmental Assessment Practitioner (EAP) for the abovementioned project to apply for an Amendment of the Environmental Authorisation (EA) (Reference: 14/12/16/3/3/2/945/AM1).

BioTherm was issued with an EA for the proposed development of the 140MW Aletta Wind Energy Facility (WEF) and its associated infrastructure near Copperton in the Northern Cape Province on 9 May 2017 (DEA Reference 14/12/16/3/3/2/945).

The amendment to the EA is required to increase the authorised turbine dimensions to have a hub height of 120m, a rotor diameter of 140m and a generation output of 3.465MW each. The proposed turbine dimensions are within the specifications assessed during the EIA process. The application for the amendment of the EA was received by the Department of Environmental Affairs (DEA) on 11 April 2019. Following a review of the application for amendment for the EA, the DEA concluded that the application falls within the ambit of amendments applied for in terms of Part 2 of Chapter 5 of the EIA Regulations, 2014 (as amended). As such, a Part 2 Amendment process is being undertaken accordingly.

Please find herewith one (1) hard copy and one (1) electronic copy (on USB) of the Draft EA Amendment Motivation Report (including all appendices) for the abovementioned proposed project, as the Part 2 Amendment process has commenced.







Please do not hesitate to contact us should you have any queries in this regard.

Andrea Gibb SiVEST Environmental P O Box 2921 RIVONIA 2128

Tel: (011) 798 0600 Fax: (011) 803 7272 Website: www.sivest.co.za E-mail: andreag@sivest.co.za

Yours sincerely

Andrea Gibb
Divisional Manager
SiVEST Environmental Division

Encl: 1 x Hard copy of the Draft EA Amendment Motivation Report (Incl. Appendices)

1 x Electronic copy (on USB) of the Draft EA Amendment Motivation Report (Incl. Appendices)



Appendix D

DRAFT ENVIRONMENTAL MANAGEMENT PROGRAMME (EMPr)



BIOTHERM ENERGY

Proposed Construction of the Aletta 140MW Wind Energy Facility near Copperton, Northern Cape Province

Draft Environmental Management Programme (EMPr)

DEA Ref No: 14/12/16/3/3/2/945/AM1

Issue Date: 15 July 2019

Version No.: 3 Project No.: 15499

Date:	15 July 2019
	Proposed Construction of the Aletta 140MW Wind Energy Facility near
Document Title:	Copperton, Northern Cape Province: Draft Environmental Management
	Programme (EMPr)
	Andrea Gibb
	B.Sc. (Hons) Environmental Management (UNISA)
	B.Sc. Landscape Architecture Cum Laude (UP)
Author:	
	Stephan Jacobs
	B.Sc. (Hons) Environmental Management & Analysis (UP)
	B.Sc. Environmental Sciences (UP)
Version Number:	3
Checked by:	Andrea Gibb
Approved:	Andrea Gibb
Signature:	Date!
For:	SiVEST Environmental Division

Confidentiality Statement

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BIOTHERM ENERGY

PROPOSED CONSTRUCTION OF THE ALETTA 140MW WIND ENERGY FACILITY NEAR COPPERTON, NORTHERN CAPE PROVINCE

DRAFT ENVIRONMENTAL MANAGEMENT PROGRAMME (EMPr)

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Glossary of Terms:

Construction Phase: The activities pertaining to the preparation for and the physical construction of the proposed development.

Contractor: Persons/organisations contracted by the Project Company to carry out parts of the work for the proposed development.

Decommissioning: Means to take out of active service permanently or dismantle partly or wholly, or closure of a facility to the extent that it cannot be readily recommissioned.

Engineer (E)/ Project Manager (PM): Person/ organisation appointed by the Project Company to oversee the work of all consultants, sub-developers, contractors, residents and visitors.

Environmental Control Officer (ECO): Person/organisation appointed by the Project Company who will provide direction to the Project Manager concerning the activities within the Construction Zone, and who will be responsible for conducting the environmental audit of the project during the construction phase of the project according to the provisions of the Environmental Management Programme.

Environmental Management Programme (EMPr): The EMPr is a detailed plan for the implementation of the mitigation measures to minimise negative environmental impacts during the life-cycle of a project. The EMP contributes to the preparation of the contract documentation by developing clauses to which the contractor must adhere for the protection of the environment. The EMPr specifies how the construction of the project is to be carried out and includes the actions required for the Post-Construction Phase to ensure that all the environmental impacts are managed for the duration of the project's life-cycle.

Operational Phase (Post Construction): The period following the Construction Phase, during which the proposed development will be operational.

Pre-Construction Phase: The period prior to commencement of the Construction Phase, during which various activities associated with the preparation for the Construction Phase will be undertaken.

Rehabilitation: Rehabilitation is defined as the return of a disturbed area to a state which approximates the state (where possible) which it was in before disruption. Rehabilitation for the purposes of this specification is aimed at post-reinstatement re-vegetation of a disturbed area and the insurance of a stable land surface. Re-vegetation should aim to accelerate the natural succession processes so that the plant community develops in the desired way, i.e. promote rapid vegetation establishment.

Site Manager: The person, representing the Contractor, responsible for all the Contractor's activities on the site including supervision of the construction staff and activities associated with the Construction Phase. The Site Manager will liaise with the Project Manager in order to ensure that the project is conducted in accordance with the Environmental Management Programme

Abbreviations:

APM Archaeology, Palaeontology and Meteorites

DEA Department of Environmental Affairs

EA Environmental Authorisation

EAP Environmental Assessment Practitioner

ECO Environmental Control Officer

EO Environmental Officer

EHS Environment, Health and Safety
EIA Environmental Impact Assessment

EMPr Environmental Management Programme

EP Equator Principles

HIA Heritage Impact Assessment HMP Heritage Management Plan

HOD Head of Department

IFC International Finance Corporation (World Bank Group)

I&APs Interested and Affected Parties

MC Main Contractor

MSDS Material Safety Data Sheets

NEMA National Environmental Management Act

OECD Organisation for Economic Co-operation and Development

OHL Overhead Line
PM Project Manager

PS Performance Standards

RoW Right of Way

SAHRA South African Heritage Resources Agency
SARAO South African Radio Astronomy Observatory

SKA Square Kilometer Array

BIOTHERM ENERGY

PROPOSED CONSTRUCTION OF THE ALETTA 140MW WIND ENERGY FACILITY NEAR COPPERTON, NORTHERN CAPE PROVINCE

DRAFT ENVIRONMENTAL MANAGEMENT PROGRAMME (EMPr)

1 INTRODUCTION

BioTherm Energy (Pty) Ltd (hereafter referred to as BioTherm) has appointed SiVEST to undertake the Environmental Impact Assessment (EIA) process and Environmental Management Programme (EMPr) for the proposed Aletta wind energy facility and associated infrastructure near Copperton, Northern Cape Province of South Africa.

This EMPr has been compiled in line with the recommendations in the above-mentioned EIA, as well as from issues identified by SiVEST. More details will be provided by the contractors and engineers once the detailed design has been completed.

1.1 Details of the EAP

As per the requirements of the NEMA (2014), the details and level of expertise of the persons who prepared the EMPr are provided in Table 1 below.

Table 1: Consultant Team

Environmental Practitioner	Andrea Gibb
Contact Details	andreag@sivest.co.za
Qualifications	B.Sc. Landscape Architecture and BSc (Hons) Environmental Management
Professional Affiliations	IAIA (International Association for Impact Assessment)
Expertise	Andrea has 11 years' work experience and specialises in undertaking and managing Environmental Impact Assessments (EIAs) and Basic Assessment (BAs), primarily related to energy generation and electrical distribution projects. She has extensive experience in overseeing public participation and stakeholder engagement processes and has been involved in environmental baseline assessments, fatal flaw / feasibility assessments and environmental negative mapping / sensitivity analyses.

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Environmental	Stephan Jacobs
Consultant	
Contact Details	stephanj@sivest.co.za
Qualifications	B.Sc. Environmental Sciences and B.Sc. (Hons) Environmental Management and
	Analysis
Professional	IAIA (International Association for Impact Association)
Affiliations	IAIA (International Association for Impact Assessment)
Expertise	 Stephan joined SiVEST in May 2015 and holds the position of Graduate
	Environmental Consultant in the Johannesburg office. Stephan specialises
	in the field of Environmental Management and has been involved in the
	compilation of Environmental Impact Assessments (EIAs) and Basic
	Assessments (BAs). Stephan has also assisted extensively in the
	undertaking of field work and the compilation of reports for specialist studies
	such as surface water and visual impact assessments. Stephan also has
	experience in Environmental Compliance and Auditing and has acted as an
	Environmental Control Officer (ECO) for several infrastructure projects.

1.2 **Site Locality and Description**

1.2.1 Regional Locality

The proposed project is located within the Northern Cape Province, approximately 17km east of Copperton. It falls within the Siyathemba Local Municipality that forms part of the Pixley ka Seme District Municipality (Figure 1). The proposed development will be accessed by the R357 which traverses the northern section of the proposed application site.

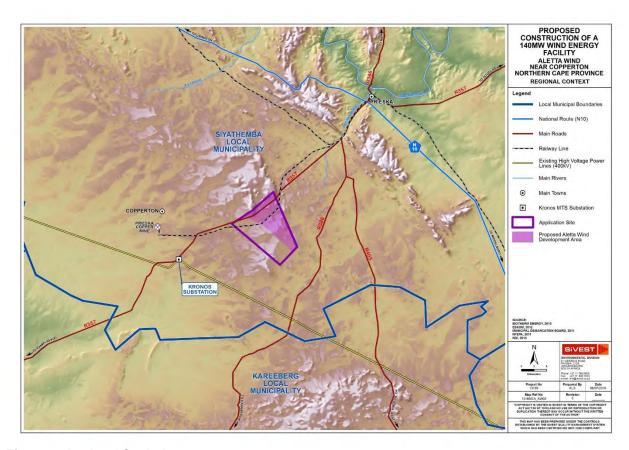


Figure 1: Regional Study Area.

The site that is proposed for the Aletta wind energy facility near Copperton is located on the following properties:

- Portion 1 of the Farm Drielings Pan No. 101, cadastral number: C0600000000010100001;
- Portion 2 of the Farm Drielings Pan No. 101, cadastral number: C06000000000010100002;
- Portion 3 of the Farm Drielings Pan No. 101, cadastral number: C0600000000010100003; and
- Remainder of the Farm Drielings Pan No. 101, cadastral number: C06000000000010100000.

The total area of the application site is approximately 11 003 hectares. Within the application site the Aletta Wind Energy Facility development area has a total area of approximately 5 639 hectares (**Figure 2**).

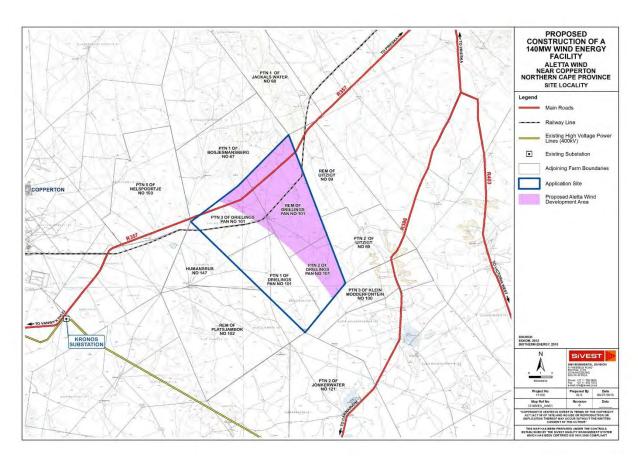


Figure 2: Site Locality

1.2.2 Study Site Description

The majority of the site falls within the Bushmanland Arid Grassland vegetation unit. However, the Lower Gariep Broken Veld vegetation unit can also be found to the north of the application site and also extends slightly into the northern part of the application site. These above-mentioned vegetation units are typically characterised by a well-developed shrub layer as well as an open tree layer. In certain areas, man has had an impact on the natural vegetation, especially around farmsteads, where over many years tall exotic trees and other typical garden vegetation have been established. Much of the surrounding area however is still characterised by natural low shrubland.

The highly arid nature of the area's climate has resulted in livestock rearing (i.e. sheep farming) being the dominant activity within the area. The nature of the climate and corresponding land use has also resulted in low stocking densities and relatively large farm properties across the area. Therefore, the majority of the area is very sparsely populated, and relatively little human-related infrastructure exists.

Built form in areas where livestock rearing occurs is limited to isolated farmsteads, gravel access roads, ancillary farm buildings, telephone lines, fences and the remnants of disused workers' dwellings. It must

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also be noted that the R357 tar road traverses the northern section of the proposed application site while the R386 gravel road can be found to the south-east of the proposed application site. In addition, several existing high voltage power lines can be found within the surrounding area, while a railway line also traverses the northern section of the application site. It should however be noted that this is an old railway line which is no longer operational.

The closest built-up areas include the small mining town of Copperton as well as the old Prieska Copper Mine which was closed in 1996. Copperton is located approximately 15km to the north-west of the application site while the old Prieska Copper Mine is located approximately 14km west. In addition, the ABB Solar Facility can also be found within close proximity to the Prieska Copper Mine. Within the above-mentioned parts of the surrounding area, greater human influence is visible in the form of mining infrastructure and electricity transmission infrastructure. The infrastructure associated with the now-defunct mine still exists, with the headgear, as well as an old slimes dams being prominent landmarks. It should be noted that patches of degraded land can be found within the application site, as well as to the south-east, south and west of the site respectively. These areas of degraded land appear to be localised along the R357 and R386 roads, as well as the railway line. In addition, very small areas characterised by cultivation can be found to the south-west and north-east of the application site respectively.

1.2.3 Climate

The climate of the study area (Monnik & Malherbe, 2005) can be regarded as warm to hot with occasional rain in summer and dry winters. The long-term average annual rainfall in this region of the Northern Cape is only 198 mm, of which 138 mm, or 69%, falls from November to April. Rainfall is erratic, both locally and seasonally and therefore cannot be relied on for agricultural practices. The average evaporation is over 2 100 mm per year, peaking at over 8.5 mm per day in December.

Temperatures vary from an average monthly maximum and minimum of 31.6°C and 11.8°C for January to 15.9°C and 1.0°C for July respectively. The extreme high temperature that has been recorded is over 42°C and the extreme low –10.0°C. Frost occurs most years on 30-40 days on average between early May and mid-September.

1.3 Overview of the proposed project

The proposed project will encompass the installation of wind turbines and associated infrastructure, in order to generate electricity that is to be fed into the National Grid. The facility will have a maximum export capacity of 140MW. The total combined footprint of the Operations and Maintenance (O&M) buildings will not exceed 300m² and the 132kV onsite Aletta IPP Substation will occupy a footprint area of approximately 2.25 ha. The final design details are yet to be confirmed. These details will become available during the detailed design phase of the project.

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1.3.1 Wind Farm Components

As mentioned, BioTherm is proposing the establishment of a wind energy facility (namely the Aletta Wind Energy Facility) on the development site near Copperton. The objective of the proposed development is to generate electricity to feed into the national grid.

During the EIA, specialist studies were undertaken and to address the potential impacts relating to the proposed development. An impact assessment was conducted to ascertain the level of each identified impact, as well as mitigation measures which may be required. The results of the specialist studies have indicated that no fatal flaws exist as a result of the proposed project. Additionally, the specialists comparatively assessed the alternatives and it was established that the layout alternatives avoid all no-go areas. The preferred site layout is indicated in **Figure 3** and **Figure 4** below.

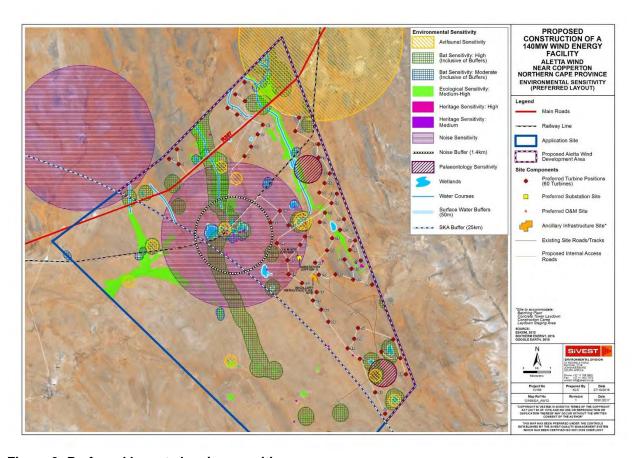


Figure 3: Preferred layout showing sensitive areas

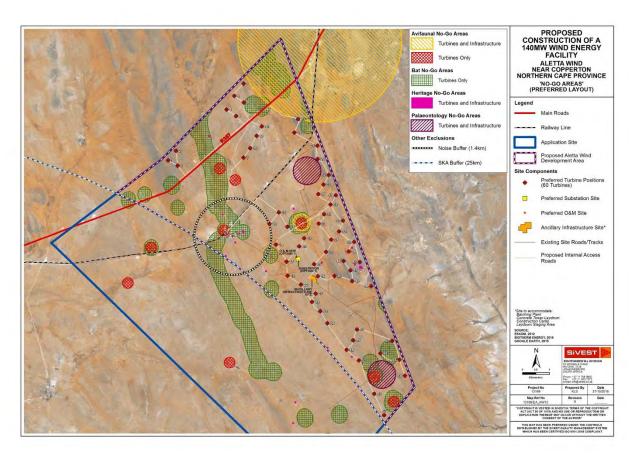


Figure 4: Preferred layout showing no-go areas

The key technical details and infrastructure required is presented in the table below (Table 2).

Table 2: Aletta Wind Energy Facility technical summary

Project	DEA Reference	Fa	rm name and	t	Те	chnical details and infrastructure	
Name	DEA Reference	are	area		ne	necessary for the proposed project	
Alettta	14/12/16/3/3/2/945	•	Portion 1	of	•	60 wind turbines with a total export	
Wind			Drielings	Pan		capacity of up to 140MW. Turbines will	
Energy			No.101			have a hub height of up to 120m and a	
Facility		•	Portion 2	of		rotor diameter of up to 150m.	
(WEF)			Drielings	Pan	•	132kV onsite Aletta IPP Substation	
			No.101		•	The turbines will be connected via	
		•	Portion 3	of		medium voltage cables to the proposed	
			Drielings	Pan		132kV onsite Aletta IPP Substation.	
			No.101		•	Internal access roads are proposed to be	
		•	Remainder	of		between 4m to 6m wide.	
			Drielings	Pan	•	A temporary construction lay down area.	
			No.101				

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	A hard standing area / platform per
Development Area:	turbine.
5 639 ha	■ The operations and maintenance
	buildings, including an on-site spares
	storage building, a workshop and an
	operations building.
	• Fencing (if required) will be up to 5m
	where required and will be either mesh or
	palisade.
	Permanent wind measurement mast.

BioTherm are also proposing to develop the associated Aletta substation and power line, both with a capacity of up to 132kV. This associated electrical infrastructure will require a separate Environmental Authorisation, is being conducted as a part of a separate Basic Assessment (BA) process and a separate EMPr will be compiled for it. The Aletta onsite substation will include an Eskom portion and an Independent Power Producer (IPP) portion, hence the substation has been included in the wind energy facility EIA and in the substation and power line BA to allow for handover to Eskom. Although the wind energy facility and the electrical infrastructure were assessed separately, a single public participation process was undertaken to consider both of the proposed developments. The potential environmental impacts associated with both developments was assessed as part of the cumulative impact assessment.

1.3.2 Turbines

The total proposed development area is approximately 5 639 hectares. The wind turbines and all other project infrastructure will be located strategically within the development area based on environmental constraints. The size of the wind turbines will depend on the development area and the total generation capacity that can be produced as a result. The wind turbines will therefore likely have a hub height of up to 120m and a rotor diameter of up to 150m (Figure 5). The blade rotation direction will be clock-wise. Each wind turbine will have a foundation diameter of up to 20m, and will be approximately 3m deep, however, these dimensions may be larger if geotechnical conditions dictate as such. The area occupied by each wind turbine will be up to 0.5 hectares (85m x 60m). The excavation area will be approximately 1 000m² in sandy soils due to access requirements and safe slope stability requirements. A hard standing area / platform of approximately 2 400m² (60m x 40m) per turbine will be required for turbine crane usage. There will be approximately 60 wind turbines constructed with a total generation capacity of up to 140MW. The electrical generation capacity for each turbine will range from 2 to 4MW depending on the final wind turbine selected for the proposed development. It must be noted that the final selection for the turbine type will be conducted after the project has been selected as a Preferred Bidder project under the Department of Energy's (DoEs) Renewable Energy Independent Power Producer Procurement Programme (REIPPPP). This is as a result of technology constantly changing as time progresses.

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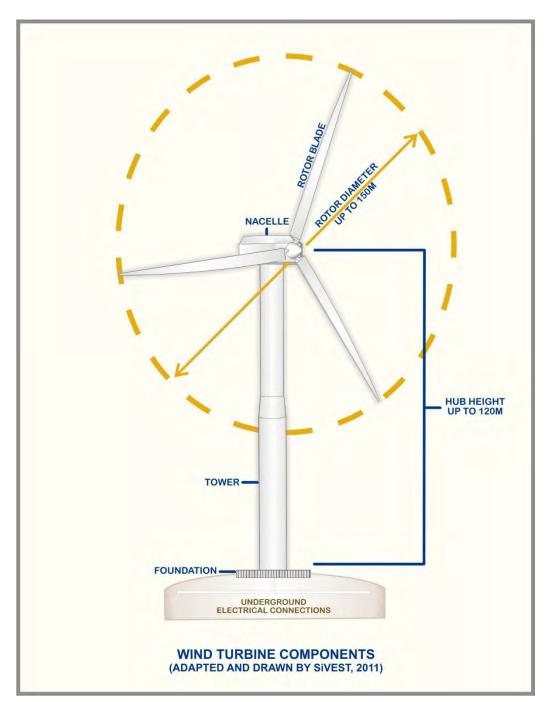


Figure 5: Typical Connections of a Wind Turbine

1.3.3 Electrical Connections

The wind turbines will be connected (**Figure 6**) to the proposed onsite Aletta 132kV substation using buried (up to a 1.5m depth) medium voltage cables except where a technical assessment of the proposed design suggests that overhead lines are more appropriate such as over rivers, gullies and long runs. Where

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overhead power lines are to be constructed, self-supported or H-pole tower types will be used. The height will vary depending on the terrain, but will ensure minimum Overhead Line (OHL) clearances with buildings, roads and surrounding infrastructure will be maintained. The dimensions of the specific OHL structure types will depend on electricity safety requirements. The exact location of the towers, the selection of the final OHL structure types and the final designs will comply with the best practise and SANS requirements.

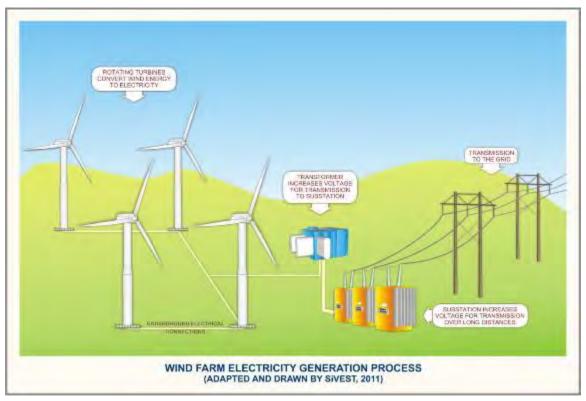


Figure 6: Conceptual Wind Energy Facility Electricity Generation Process showing Electrical Connections

1.3.4 Roads

The internal access roads are proposed to be between 4m to 6m wide and approximately 60km in total. This will include the net load carrying surface excluding any V drains that might be required. Double width roads will be required in strategic places for vehicle passing or turning.

1.3.5 Temporary Construction Area

The temporary construction lay down area will be approximately 2 400m² (60m x 40m). The lay-down / staging area will be approximately 11 250m² whilst the lay-down area for concrete towers (only if required) will be approximately 40 000m².

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1.3.6 Operation and Maintenance (O&M) Buildings

The operation and maintenance buildings will include an on-site spares storage building, a workshop and operations building with a total combined footprint that will not exceed 300m². The operation and maintenance buildings will be situated in proximity to the wind farm substation due to requirements for power, water and access.

1.3.7 Other Associated Infrastructure

Other associated infrastructure includes the following:

- Fencing (if required) will be up to 5m where required and will be either mesh or palisade.
- Permanent wind measurement mast.

1.4 Specific Conditions Pertaining to Authorisation

Should the Department of Environmental Affairs (DEA) issue an EA for the project, this EMPr will be updated to include all the pre-construction, construction, operation and decommissioning conditions stipulated in the EA.

Specific conditions pertaining to regulatory processes, or Licensee / Holder of the Authorisation requirements, have not been included within the EMPr. These conditions are to be undertaken by the Licensee / Holder of the Authorisation prior to the commencement of construction related activities.

1.5 Project Responsibilities

The roles and responsibilities of all the key role players involved in the EMPr are represented below.

1.5.1 The Project Company

The Project Company will be responsible for the overall control of the project site in environmental terms during the pre-construction, construction, operation, decommissioning and rehabilitation phases of the proposed project. These responsibilities include the following:

- Appointing an independent ECO for the duration of the Contract and notify the DEA of their contact details;
- Being fully familiar with the EIA Report, EA conditions and the EMPr;
- Notifying the DEA of changes in the developments that result in significant environmental impacts;
- Notifying the DEA within 30 days of change of ownership;

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- Notifying the DEA of any change of address of the owner/Project Company;
- The overall implementation of the EMPr;
- Ensuring compliance, by all parties, and the imposition of penalties for non-compliance
- Implementing corrective and preventive actions, where required;
- Preventing pollution and actions that will harm or may cause harm to the environment;
- Ensuring the activity does not commence within 30 days of the EA being issued;
- Notifying the DEA within 30 days that construction activity will commence;
- Notifying the DEA in writing within 24 hours if any condition in the EA cannot be or is not adhered to; and
- Notifying the DEA 14 days prior to commencement of the operational phase.

1.5.2 Construction Team

Several professionals will form part of the construction team. The most important from an environmental perspective are the Project Manager (PM), the Contractor Project Manager (CPM), the Main Contractor (MC), the Environmental Control Officer (ECO), the Environmental Officer (EO) and the Community Liaison Officer (CLO).

The PM is responsible for the implementation of the EMPr on the site during the pre-construction and construction phases of the project.

The CPM is responsible for the establishment and management of contracts for the Main Contractor and the Sub-contractors.

The MC is responsible for abiding by the mitigation measures of the EMPr which are implemented by the Project Manager during the construction phase.

The MC is also responsible for the implementation of the EMPr during the operational and decommissioning phases of the project. However, it must be noted that the MC may change for each phase of the project. The EMPr will therefore be applicable to the relevant MC appointed for each phase of the project.

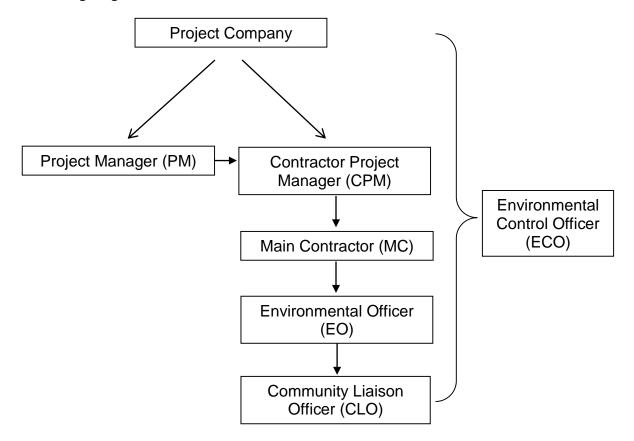
The ECO is responsible for monitoring the implementation of the EMPr during the design, pre-construction and construction phases of the project.

The EO is responsible for managing the daily onsite implementation of the EMPr.

The CLO is responsible for managing the daily on-site implementation of the social aspects of the EMPr.

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Basic Organogram:



1.5.3 Project Manager

The PM is responsible for overall construction management of the project as well as the implementation of the EMPr. The following tasks will fall within his / her responsibilities:

- Be aware of the findings and conclusions of the Environmental Impact Assessment and the conditions stated within the EAs;
- Be familiar with the recommendations and mitigation measures of this EMPr, and implement these measures:
- Monitor site activities on a daily basis for compliance;
- Confine the construction site to the demarcated area; and
- Rectify transgressions through the implementation of corrective action.

The Project Manager will assume ultimate responsibility. However, the abovementioned tasks can be delegated to the on-site manager for daily management.

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1.5.4 Contractor Project Manager

The CPM will undertake overall project contracts management between the Main Contractor and the appointed Sub-Contractors. The following tasks will fall within his / her responsibilities:

- Responsible for establishing contractual agreements with the Main Contractor and Sub-Contractors, and ensuring that sub-contractors adhere to the EMPr;
- One of the key contracts will be for the supply, transport, erection and commissioning of the turbines.

1.5.5 Main Contractor

The MC is responsible for the implementation and compliance with recommendations and conditions set out in the EMPr. This requires that the MC be familiar with the EIA report, EA conditions and the EMPr. This encompasses the following activities:

- Ensuring compliance with the EMPr at all times during construction;
 - Ensuring that all subcontractors have a copy of and understand the contents of the EMPr, to ensure environmental best practice.
- Preventing pollution and avoid actions that will impact or harm the surrounding environment;
- Responsible for the construction activities to be carried out for the duration of the project (with subcontractors and contract workers);
- Implementing corrective and preventive actions, where required;
- Maintain an environmental register which keeps a record of all incidents which occur on the site during construction. These incidents include:
 - Public involvement / complaints;
 - Health and safety incidents;
 - Hazardous materials stored on site; and
 - Non-compliance incidents.
 - Development of specific method statements prior to commencement of environmentally sensitive constructions activities as identified in the EMPr.

1.5.6 Environmental Control Officer

The ECO is responsible for the implementation of the EMPr during the construction phase and liaison between the Contractor and the Landowners. The ECO should have a relevant environmental degree or relevant tertiary qualification. The ECO is also to be an independent party. The ECO will liaise and report to the Contractor and authorities, thus the ECO should have effective communication and negotiating skills. The following tasks will fall within his / her responsibilities:

- Be aware of the findings and conclusions of the Environmental Impact Assessment and the conditions stated within the EAs.
- Work with the construction team to review relevant risk/ method statements from an environmental

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perspective;

- Be familiar with the recommendations and mitigation measures of this EMPr;
- Conduct monthly audits of the construction site according to the EMPr and EAs. A monthly report will be produced detailing the findings of the audit highlighting any non-compliance issues. Positive compliance with the EMPr will also be noted;
- Educate the construction team about the management measures of the EMPr and EAs.
- Regular liaison with the construction team and the project leader;
- Recommend corrective action for any environmental non-compliance incidents on the construction site;
- The affected parties shall always be kept informed about any changes to the construction programme should they be involved. If the ECO is not on site, the Contractor should keep the affected parties informed. The contact numbers of the Contractor and the ECO shall be made available to the affected parties. This will ensure open channels of communication and prompt response to queries and claims; and
- Liaising with the heritage specialist in the case of unearthing of artefacts and/ or graves.

The ECO is responsible for providing an independent evaluation of compliance with the EMPr and not for enforcement of conditions of the EMPr. The Project Company is responsible for enforcement of the conditions of the EMPr.

The Contractor and the EO are accountable to the ECO for non-compliance with the EMPr. The ECO provides feedback to the Project Company and I&APs, as required. Issues of non-compliance raised by the ECO must be taken up by the Project Company's Representative and resolved with the Contractor as per the conditions of his/her contract.

The ECO will remain employed for the full duration of the contract until all snag items have been resolved, rehabilitation measures have been completed, and the site is handed over to the Operator, thereby indicating the start of the operational phase.

1.5.7 Environmental Officer

The EO must be appointed by the Contractor and is responsible for managing the daily onsite implementation of the EMPr, and for the compilation of weekly environmental monitoring reports. In addition, the EO must act as liaison and advisor on all environmental and related issues, seek advice from the ECO when necessary, and ensure that any complaints received from I&APs are duly processed and addressed and that conflicts are resolved in an acceptable manner and timely manner. The EO shall be full time dedicated member of the Contractor's team and must be approved by the Project Company.

The following qualifications, qualities and experience are recommended for the individual appointed as the EO:

A relevant environmental diploma or degree in natural sciences, as well as a minimum of three years'

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- experience in construction site monitoring, excluding health and safety;
- A level-headed and firm person with above-average communication and negotiating skills. The ability to handle and address conflict management situations will be an advantage; and
- Relevant experience in environmental site management and EMPr compliance monitoring.

The EO's responsibilities include:

- Monitoring, on a daily basis, environmental specifications on site and compliance with the conditions of the EA, environmental legislation and EMPr;
- Keeping a register of compliance / non-compliance with the environmental specifications;
- Identifying and assessing previously unforeseen, actual or potential impacts on the environment;
- Ensuring that a brief weekly environmental monitoring report is submitted to the ECO;
- Conducting site inspections during the defects liability period, and bringing any environmental concerns to the attention of the ECO and Contractor;
- Advising the Contractor on the rectification of any pollution, contamination or damage to the construction site, rights of way and adjacent land;
- Attending site meetings (scheduled and ad hoc);
- Presenting the environmental awareness training course to all staff, Contractors and Sub contractors, and monitoring the environmental awareness training for all new personnel on-site, as undertaken by the Contractor;
- Ensuring that a copy of the EA and the latest version of the EMPr are available on site at all times;
- Ensuring that the Contractor is made aware of all applicable changes to the EMPr that are approved by the DEA;
- Assisting the Contractor in drafting environmental method statements and/or the Environmental Policy where such knowledge/expertise is lacking;
- Undertaking daily environmental monitoring to ensure the Contractor's activities do not impact upon the receiving environment. Such monitoring shall include dust, noise and water monitoring; and
- Maintaining the following on site:
 - o A weekly site diary.
 - o A non-conformance register.
 - An I&AP communications register, and
 - A register of audits.

The EO will remain employed until all rehabilitation measures, as required for implementation due to construction damage, are completed and the site is handed over to the Operator.

1.5.8 Community Liaison Officer

The CLO shall be employed by the Contractor and will be responsible for managing the daily on-site implementation of the social aspects of the EMPr. The CLO shall liaise with landowners and relevant I&APs regarding construction activities for the duration of construction and will ensure that any discussions and

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complaints received from the public are addressed and that conflicts are resolved in an acceptable manner within 10 days.

The CLO(s) shall be full time dedicated member(s) of the Contractor's team and must be accepted by the Project Company. The CLO shall report to the Contractor's Project Manager, seeking advice from the ECO when necessary.

The CLO may be the same person as the EO, but will assume all the responsibilities of the dual roll.

The following qualifications, qualities and experience are recommended for the individual appointed as the Contractor's CLO:

- A person with communication and negotiating skills;
- Report writing skills; and
- Fluency in English, Afrikaans and any other local language as and where required.

The responsibilities and functions of the Construction CLO will include:

- Implement and manage the daily social and communication aspects of the construction process according to the EMPr;
- Liaise and maintain good relations with I&APs;
- Monitor social aspects in terms of the specifications;
- Implement mitigation and corrective measures;
- Submit a monthly environmental report to the Contractor's Project Manager;
- Conduct site inspections during the defects notification period, and bring any social concerns to the attention of the Contractor;
- Attend site meetings (scheduled and ad hoc);
- Maintain a filing system meeting the project's quality management plan;
- Assist the Contractor in the drafting of social methods statements where such knowledge/expertise is lacking;
- Maintain the following on site:
 - A daily site diary;
 - A public complaints and communications register; and
 - A register of audits.
- Remain employed until the end of construction.

1.5.9 Responsible Parties and Auditing Process

As described above,

Table 3 below provides a summary of the responsible parties and the auditing process to be carried out.

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Table 3: Responsible Parties and Auditing Process

TITLE	PARTY	ROLE DURING	ROLE DURING
		CONSTRUCTION	OPERATION
Project Company	Special Purpose Vehicle	Assume ultimate	Assume ultimate
	(SPV) to be confirmed	responsibility	responsibility
	once registered		
Project Manager	To be appointed by	Construction	N/A
	proponent	management	
Contractor's Project	Balance of Plant	Project management	N/A
Manager	Contractor		
Main Contractor/s	There will be multiple	Main Contractor will	N/A
	contracts placed and	undertake day to day	
	managed by the	construction activities	
	Contractor's Project	covering aspects such as	
	Manager for the	civil earthworks and	
	construction phase.	concrete, structural	
	These will cover civil	mechanical and	
	earthworks and	electrical /	
		instrumentation (CI).	
	mechanical and		
	electrical /		
	instrumentation (CI).		
	Then there could also be		
	the construction camp		
	management contract.		
Environmental Officer	To be appointed by Main		N/A
	Contractors	environmental	
		responsibility, point of	
	-	contact for ECO	A 1 12
	To be appointed by	iviontnly audits	Annual audits
Officer	proponent		NA dia A Pr
Community Liaison	, ,	Day to day contact for	Monthly Audits
Officer	Contractors	landowners and I&APs	
Determining Authority	·	Conduct site visits when	
		necessary.	necessary
	(DEA)		

The following are the environmental management responsibilities (Table 4) of the various parties during construction and operational phases. Unless otherwise stated, the EMPr will be adhered to as follows:

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- The EO will be the responsible party for all daily compliance of this EMPr during the construction phase;
- The monitoring party will be the ECO;
- Method of record keeping will be monthly audits undertaken by the ECO;
- Audit Technique will be the review of records and documentation (including EMPr/EA) that will be kept on site by the EO and/ or site inspections; and
- The Project Company will bear ultimate responsibility.

Table 4: Environmental Management Responsibilities

ITEM	PROJECT COMPONENT AND	RESPONSIBLE PARTY	MONITORING	AUDIT
	ACTIVITY		PARTY	TECHNIQUE
1.1	PRE-CONSTRUCTION (SITE			
	ESTABLISHMENT)			
1.1.1	Site preparation	PROJECT COMPANY,	PROJECT COMPANY,	SITE VISIT
		MC, EO, ECO	ECO	
1.1.2	Consultation	MC, CLO	EO, ECO	SITE VISIT
1.1.3	Cumulative impacts	MC,	EO, ECO	SITE VISIT
1.1.4	Social and Environmental	MC,	EO, ECO	SITE VISIT
	Management Systems			
2.1	CONSTRUCTION ACTIVITIES			
2.1.1	Site Clearing	MC,	EO, ECO	SITE VISIT
2.1.2	Construction traffic and access	MC, EO	ECO	SITE VISIT
2.1.3	Construction Camp	MC, EO, ECO	ECO	SITE VISIT
2.1.4	Environmental Education and	PROJECT COMPANY,	PROJECT COMPANY,	SITE VISIT
	Training	MC	ECO	
2.1.5	Soils and Geology	MC, EO	ECO	SITE VISIT
2.1.6	Erosion Control	EO	ECO	SITE VISIT
2.1.7	Water Use and Quality	EO	ECO	SITE VISIT
2.1.8	Surface and Groundwater	EO	ECO	RECORDS
				REVIEW
2.1.9	Waste Management	EO	ECO	SITE VISIT
2.1.10	Flora	EO	ECO	SITE VISIT
2.1.11	Fauna	EO	ECO	RECORDS
				REVIEW, SITE
				VISIT

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2.1.12	Air Quality	EO	ECO	RECORDS
2.1.12	All Quality			REVIEW
2.1.13	Noise and Vibrations	EO	ECO	RECORDS
				REVIEW
2.1.14	Energy use	EO	ECO	RECORDS
				REVIEW
2.1.15	Climate Change	EO	ECO	RECORDS
				REVIEW
2.1.16	Agricultural Potential	EO	ECO	RECORDS
				REVIEW
2.1.17	Employment	PROJECT COMPANY,	ECO	RECORDS
		MC		REVIEW
2.1.18	Occupational Health and Safety	MC, EO	CLO	SITE VISIT
2.1.19	Health and Safety	MC, EO	HEALTH AND SAFETY	SITE VISIT
			OFFICER	
2.1.20	Security	MC, EO	ECO	SITE VISIT
2.1.21	Social Environment	PROJECT COMPANY,	ECO	RECORDS
		MC, CLO		REVIEW, SITE
				VISIT
2.1.22	Community Engagement	CLO	ECO	SITE VISIT
2.1.23	Visual Impact	EO	ECO	SITE VISIT
2.1.24	Heritage Impact	PROJECT COMPANY,	ECO	SITE VISIT
		MC, EO		
2.1.25	Avifauna Impact	PROJECT COMPANY,	ECO	SITE VISIT
		MC, EO		
3.1	OPERATION ACTIVITIES			
3.1.1	Construction Site	PROJECT COMPANY	ECO	RECORDS
	Decommissioning			REVIEW
3.1.2	Operation and Maintenance	PROJECT COMPANY	ECO	RECORDS
				REVIEW
3.1.3	Surface and Groundwater	PROJECT COMPANY	ECO	RECORDS
				REVIEW
3.1.6	Pollution Control	PROJECT COMPANY	ECO	RECORDS
				REVIEW
3.1.7	Biodiversity	PROJECT COMPANY	ECO	RECORDS
				REVIEW
3.1.8	Waste Management	PROJECT COMPANY	ECO	RECORDS
				REVIEW

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3.1.9	Health and Safety	PROJECT C	OMPANY	ECO		RECORDS	3
						REVIEW	
3.1.10	Visual Impact	PROJECT C	OMPANY	ECO		RECORDS	3
						REVIEW	
3.1.11	Avifauna Impact	PROJECT C	OMPANY	ECO		RECORDS	3
						REVIEW	AND
						SITE VISIT	Γ
4.1	DECOMMISSIONING						
	ACTIVITIES OF PROPOSED						
	DEVELOPMENT						
4.1.1	Ongoing Stakeholder	PROJECT	COMPANY,	PROJECT	COMPANY	SITE VISIT	Г
	involvement	CLO					
4.1.2	Community health and safety	PROJECT	COMPANY,	PROJECT	COMPANY	RECORDS	3
		CLO				REVIEW	
4.1.3	Waste management	PROJECT	COMPANY,	PROJECT	COMPANY,	RECORDS	3
		EO		ECO		REVIEW	AND
						SITE VISIT	Γ
4.1.4	Surface and groundwater	PROJECT	COMPANY,	PROJECT	COMPANY,	RECORDS	3
		EO		ECO		REVIEW	AND
						SITE VISIT	Γ
4.1.5	Biodiversity	PROJECT	COMPANY,	PROJECT	COMPANY,	RECORDS	3
		EO		ECO		REVIEW	AND
						SITE VISIT	Γ
4.1.6	Air quality	PROJECT	COMPANY,	PROJECT	COMPANY,	RECORDS	3
		EO		ECO		REVIEW	AND
						SITE VISIT	Г

1.5.10 Environmental Audits

Table 5 below provides an outline of the generic process involved in the auditing process. It briefly describes the activities of the process initially beginning with defining the objectives and scope of the auditing process as well as the responsibilities of the various parties. The procedure for the auditing process is explained through to the production of audit findings and the compliance (or non-compliance) of the audit findings.

Table 5: Example of Procedure for Conducting Audits

Objective	To ensure that formal audits of the EMPr are scheduled
	and performed so as to verify compliance with the
	requirements of the EMPr.

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required to perform a compliance audit and the verification of implemented corrective action. The Project Company is responsible for the maintenance of the Environmental Audit System as part of the Environmental Management System (EMS). The ECO will audit the effectiveness of the EMS yearly. The ECO is responsible for the scheduling and execution of the audit, as well as the verification of the implementation of corrective action. At his/her discretion, this authority may be delegated to responsible company personnel or to an independent Environmental Auditing Authority to perform the audit on his/her behalf. Auditors shall have no direct responsibility in the area/ system being audited. They will be trained in techniques for auditing environmental management systems. The head of department (HOD)/ supervisor for an area/system to be audited (or a responsible person nominated by him/ her) will assist the audit team in the execution of the audit. The HOD will also be responsible for timely corrective actions based on the findings of the audit. Planning the audit The ECO or his authorised delegate, shall plan the audit of a particular environmental area or system as follows: He shall inform, in writing, the contractor to be audited of the intention to conduct an audit at least two weeks prior to the audit. This notification should include the audit objective, scope and duration and any assistance required from the contractor. On completion of the audit, an audit findings report shall be prepared and submitted to the Project Company, project manager and construction team. Corrective actions shall be implemented, within four weeks after the audit, where possible.	Scope	This procedure describes the sequence of events
The Project Company is responsible for the maintenance of the Environmental Audit System as part of the Environmental Management System (EMS). The ECO will audit the effectiveness of the EMS yearly. The ECO is responsible for the scheduling and execution of the audit, as well as the verification of the implementation of corrective action. At his/her discretion, this authority may be delegated to responsible company personnel or to an independent Environmental Auditing Authority to perform the audit on his/her behalf. Auditors shall have no direct responsibility in the area/ system being audited. They will be trained in techniques for auditing environmental management systems. The head of department (HOD)/ supervisor for an area/system to be audited (or a responsible person nominated by him/ her) will assist the audit team in the execution of the audit. The HOD will also be responsible for timely corrective actions based on the findings of the audit. Planning the audit The ECO or his authorised delegate, shall plan the audit of a particular environmental area or system as follows: He shall inform, in writing, the contractor to be audited of the intention to conduct an audit at least two weeks prior to the audit. This notification should include the audit objective, scope and duration and any assistance required from the contractor. On completion of the audit, an audit findings report shall be prepared and submitted to the Project Company, project manager and construction team. Corrective actions shall be implemented, within		1
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The head of department (HOD)/ supervisor for an area/system to be audited (or a responsible person nominated by him/ her) will assist the audit team in the execution of the audit. The HOD will also be responsible for timely corrective actions based on the findings of the audit. Planning the audit The ECO or his authorised delegate, shall plan the audit of a particular environmental area or system as follows: He shall inform, in writing, the contractor to be audited of the intention to conduct an audit at least two weeks prior to the audit. This notification should include the audit objective, scope and duration and any assistance required from the contractor. On completion of the audit, an audit findings report shall be prepared and submitted to the Project Company, project manager and construction team. Corrective actions shall be implemented, within		They will be trained in techniques for auditing
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Audit Check List	Auditing will be performed by collecting evidence for
	verification through interviews, relevant documentation
	and observation of activities and conditions. Instances of
	non-conformity to EMPr criteria should be recorded. An
	environmental audit checklist can be used as a guide to
	address all relevant issues.
Audit Compliance	See below.
Audit Findings and Reporting of non-	The audit team shall review all evidence of their audit
compliances	findings to decide on non-compliance. Audit findings of
	non-compliance must be documented and supported by
	evidence in the Audit Findings Report.
	The near compliance findings will be communicated to the
	The non-compliance findings will be communicated to the
	Project Manager and his representatives during an audit
	feedback meeting.

1.6 Layout of Environmental Management Programme

1.6.1 Introduction

This EMPr addresses both generic issues as well as specific issues. The generic and specific issues are each separated into different phases. Each phase has specific issues unique to that period of the development and operation of the wind energy facility as well as associated infrastructure. The impact is identified and given a brief description. The phases of the development are then identified as below:

- Pre-construction (Site Establishment)
- Construction (including associated rehabilitation of affected environment)
- Operation Phase
- Decommissioning

This EMPr seeks to manage and keep to a minimum the negative impacts of a development and at the same time, enhance the positive and beneficial impacts.

The EMPr specifies mitigation measures for the following environmental aspects:

1.6.2 Pre-construction (Site establishment)

- Site preparation
- Consultation

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- Site clearing
- Social and Environmental Management Systems

1.6.3 Construction

- Construction Camp
- Construction Traffic and Access
- Environmental Education and Training
- Soils and Geology
- Erosion Control
- Water Use and Quality
- Surface and Groundwater
- Waste Management
- Flora
- Fauna
- Air Quality
- Noise and Vibrations
- Energy Use
- Employment
- Occupational Health and Safety
- Security
- Social Environment
- Cultural and Heritage Artefacts
- Community Engagement
- Visual Impact

1.6.4 Operation

- Construction Site Decommissioning
- Operation and Maintenance
- Surface and Groundwater
- Biodiversity
- Waste Management
- Health and Safety
- Visual Impact
- Avifauna
- Social

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1.6.5 Decommissioning Phase

- Ongoing Stakeholder involvement
- Community health and safety
- Waste Management
- Surface and Groundwater
- Biodiversity
- Air Pollution

1.7 Objectives of an EMPr

The objectives of this EMPr are to:

- Identify a range of mitigation measures which could reduce and mitigate the potential impacts to minimal or insignificant levels
- To identify measures that could optimise beneficial impacts
- To create management structures that address the concerns and complaints of I&APs with regards to the development
- To establish a method of monitoring and auditing environmental management practices during all phases of development
- Ensure that the construction and operational phases of the project continues within the principles of Integrated Environmental Management and EMS ISO 14001 Principles
- Detail specific actions deemed necessary to assist in mitigating the environmental impact of the project.
- Ensure that the safety recommendations are complied with.
- Propose mechanisms for monitoring compliance with the EMPr and reporting thereon.
- Specify time periods within which the measures contemplated in the EMPr are implemented, where appropriate.

The EMPr Seeks to highlight the following:

- Avoiding impacts by not performing certain actions
- Minimising impacts by limiting aspects of an action
- Rectifying impacts through rehabilitation, restoration, etc. of the affected environment
- Compensating for impacts by providing substitute resources or environments
- Minimising impacts by optimising processes, structural elements and other design features
- Provide ongoing monitoring and management of environmental impacts of a development and documenting of any digressions /good performances
- The EMPr is a legally binding document that all parties involved in the project must be made aware
 of.

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1.7.1 Environmental monitoring

A monitoring programme will be implemented for the duration of the lifecycle of proposed development. This programme will include:

Monthly Audits During the Construction Phase

- According to the EMPr conditions which will be conducted by the ECO. These audits can be conducted randomly and do not require prior arrangement with the project manager.
- Compilation of an audit report with a rating of the compliance with the EMPr. This report will be submitted to the relevant authorities.

Annual Audits During the Operational Phase

Undertaken by the ECO.

The ECO shall keep a photographic record of any damage to areas outside the demarcated site area. The date, time of damage, type of damage and reason for the damage shall be recorded in full to ensure the responsible party is held liable. All claims for compensation emanating from damage should be directed to the ECO for appraisal. A register shall be kept of all complaints from the landowner or community (Annexure A). All complaints / claims shall be handled immediately to ensure timeous rectification / payment by the responsible party.

A copy of the EMPr must be kept on site during the life of the wind energy facility. The EMPr will be made binding on all contractors operating on the site and must be included within the Contractual Clauses. Those responsible for environmental damage must pay the repair costs both to the environment and human health and the preventative measures to reduce or prevent further pollution and/or environmental damage (the polluter pays principle).

1.8 Applicable Legislation, Development Strategies and Guidelines

The following legislation applies:

- Constitution of South Africa (Act No. 108 of 1996)
- National Environmental Management Act (Act No 107 of 1998) NEMA
- Environment Conservation Act (Act No 73 of 1989)
- National Heritage Resources Act (Act No 25 of 1999)
- National Water Act (Act No 36 of 1998)
- National Environmental Management: Biodiversity (Act No. 10 of 2004)
- National Forests Act, 1998 (Act No. 84 of 1998)
- Conservation of Agricultural Resources Act No. 43 of 1983)

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- Subdivision of Agricultural Land (Act No. 70 of 1970, as amended)
- National Road Traffic (Act No. 93 of 1996, as amended)
- Civil Aviation Act (Act No.13 of 2009)
- Occupational Health and Safety Act No. 85 of 1993
- National Environmental Management: Air Quality Act, 2004 (Act No. 39 of 2004)
- National Environmental Management: Waste Act, 2008 (Act No. 59 of 2008)
- Development Facilitation Act No. 67 of 1995
- National Protected Areas Act (Act No. 25 of 2003)

Several regulations will be applicable to the construction phase of the project. These guidelines are mentioned in the EMPr tables. Also of significance in this EMPr are:

- World Bank International Finance Corporation (IFC),
- EHS Guidelines and
- Equator Principles

1.8.1 The Equator Principles

The Equator Principles (2013) are a financial industry benchmark for determining, assessing and managing social & environmental risk in project financing. A number of banks, exchanges and organisations worldwide have adopted the Principles as requirements to be undertaken for project funding on application and approval. Furthermore, certain funding institutions have not formally adopted the Principles, but require clients to be compliant with them in order to qualify for loans.

Under Principle 3, the Equator Principles establish the International Finance Corporations (IFC) Performance Standards and associated General and Sector Specific Environmental, Health and Safety Guidelines as the applicable social and environmental standards that a project should comply with if the project is located in a non-OECD country or OECD country that is not designated as high income.

The social and environmental assessment that is undertaken for a project establishes whether or not the project is in compliance with the IFC Performance Standards¹.

According to these principles, the performance standards relevant to the proposed development are summarised in **Table 6**.

Table 6: IFC Performance Standards

Performance Standard	Intent and objective

¹ **NB** A project does not seek compliance with the Equator Principles per se but the standards that the EP refers to. A financial institution that has adopted the EP must ensure that any projects it is financing meet the standards referred to and that it adopts an appropriate risk management system to ensure this.

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Assessment and Management of Environmental and Social Risks and Impacts (1)	 Adverse and beneficial impacts should be identified within the projects Area of Influence. Emphasis on integrated assessment of social and environmental impacts. Compliance with national legislation and IFC PS and EHS guidelines as appropriate. Emphasis on avoidance of impacts wherever practical and where this is not feasible, minimizes, mitigate and compensate. To ensure effective and ongoing stakeholder engagement To assess specifically the capacity and commitment of clients to manage risks and opportunities over the course of the transaction.
Labour and Working Conditions (2)	 Looks at the working conditions by following these principles; To establish and maintain the worker- management relationship (including specifically a human resources policy). To promote fair treatment, non-discrimination and equal opportunity of employees (and some contractors) and meet national employment laws. To protect the workforce by addressing child labour and forced labour. To promote healthy and safe working conditions.
Resource Efficiency and	To avoid and minimize adverse impacts on human health
Pollution Prevention (3)	 and the environment by avoiding or minimizing pollution from project activities. To promote the reduction of emissions that contributes to climate change.
Community Health Safety and	To avoid or minimise risks to and impacts on the health and agfety of the legal community during the project life available.
Security (4)	safety of the local community during the project life cycle from both routine and non-routine circumstances.
	 To ensure that the use of security personnel is carried out in a legitimate manner that avoids or minimizes risks to the community's safety and security.
Land Acquisition and Involuntary	To avoid or at least minimize involuntary resettlement
Resettlement (5)	 wherever feasible by exploring alternative project designs. To mitigate adverse social and economic impacts from land acquisition or restrictions on affected persons' use of land by; (i) providing compensation for loss of assets at replacement cost, and (ii) ensuring that resettlement activities are implemented with appropriate disclosure of information,

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	 consultation, and the informed participation of those affected. To improve or at least restore the livelihoods and standards of living of displaced persons. To improve living conditions among displaced persons through provision of adequate housing with security of tenure at resettlement sites.
Biodiversity Conservation and	 To promote and conserve biodiversity.
Sustainable Management of	 To avoid the introduction of alien invasive species.
Living Natural Resources (6)	 To promote sustainable management and use of natural resources (NRM).
Indigenous People (7)	 To foster full respect for the dignity, human rights, aspirations, cultures and natural resource-based livelihoods of Indigenous Peoples (IP). To avoid impacts or where avoidance is not feasible, minimize, mitigate and compensate in a culturally appropriate fashion and within the framework of successful good faith negotiation (a form of stakeholder engagement requiring approval of both parties). To establish and maintain effective relationships with IPs over the course of the project.
Cultural Heritage (8)	 To protect cultural heritage from adverse impacts of project activities and support its preservation. To promote the equitable sharing of benefits from the use of cultural heritage in business activities.

(Source; IFC Guidelines, 2012)

2 ENVIRONMENTAL DOCUMENTATION, REPORTING AND COMPLIANCE

2.1 Documentation

The Contractor must ensure the following documentation is kept on the project site for the full duration of the contract:

- Final Environmental Management Programme once approved by the DEA;
- EA issued by the DEA;
- Environmental Policy of the Contractor;
- Environmental method statements compiled by the Contractor;
- Weekly environmental monitoring records;
- Minutes and record of attendance of all environmental meetings;

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- Environmental incident book;
- Communications register;
- Register of audits;
- Non-conformance reports; and
- Waste manifests.

2.1.1 Weekly Environmental Monitoring Report

The EO will be required to provide the Main Contractor with a brief weekly environmental monitoring report covering the onsite events which occurred during the past week. This will highlight key performance areas and provide feedback on corrective and preventive actions taken. The EO will have the weekly reports submitted by the Contractor's Manager prior to submission to The Project Company for monthly reporting.

2.1.2 Site Meetings

Weekly site meetings are undertaken which include environmental matters. This meeting shall be chaired by a Senior Site Representative with the Project Company, Contractor(s), the EO ('s), and CLO ('s) in attendance. Where practical or necessary, the ECO will need to attend if possible.

2.1.3 Method Statements

It is a statutory requirement to ensure the wellbeing of employees and of the environment. Therefore, the Contractor shall submit a Method Statement to the Project Company and the ECO for approval prior to the commencement of construction works.

A Method Statement is a document detailing how a particular process will be carried out. It should detail the possible dangers/risks associated with the particular part of the project and the methods of control to be established and to show how the work will be managed in a safe and environmentally responsible manner. The method statement shall also include the following information, where applicable:

- The type of construction activity;
- Timing and location of the activity;
- Construction procedures;
- Materials and equipment to be used;
- Transportation of the equipment to and from site;
- How the equipment/material will be moved while on site;
- Location and extent of construction site office and storage areas;
- Identification of impacts that might result from the construction activity;
- Population impacts;
- Community/institutional arrangements;

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- Conflicts between local residents and newcomers;
- Individual and family level impacts;
- Community infrastructure needs;
- Intrusion impacts;
- Methodology and/or specifications for impact prevention or containment and for environmental monitoring;
- Emergency/disaster incident and reaction procedures (required to be demonstrated); and
- Rehabilitation procedures and continued maintenance of the impacted environment.

The Contractor will be accountable for all actions taken in non-compliance of the approved method statements. The Contractor shall keep all the method statements and subsequent revisions on file, copies of which must be distributed to all relevant personnel for implementation.

The Contractor will be required to submit, as a minimum, the relevant method statements as requested by the ECO which are to be compliant with the conditions of the EMPr for review prior to the start of that specific activity.

2.1.4 Communications Register

All complaints or communications that are received from I&APs or any other stakeholder must be recorded in a communications register. These complaints and communications will be brought to the attention of the Project Company, whereupon it will be investigated and a response to the Complainant, I&APs or stakeholder will be given within 10 days. The communications register shall include the following information:

- Record the time and date of the complaint/communication;
- A detailed description of the complaint/communication;
- Action and resources used to correct the complaint;
- Photographic evidence of the complaint (where possible);
- A written response to the complainant indicating rectification of the complaint; and
- Information regarding the relevant authority that was contacted or notified in writing where applicable (person, time and date).

The relevant authorities include:

- Department of Water and Sanitation (e.g. for any incidents involving the contamination of water resources).
- DEA (e.g. for any significant incident of pollution of the soil and air).
- Department of Agriculture, Forestry and Fisheries (e.g. uses of appropriate herbicides for eradication of alien invasive species, and permits for trees of special concern).
- Department of Health (e.g. for incidents such as contamination of water resources, accidental spill of hazardous substances).
- Department of Transport (e.g. for the diversion of traffic due to construction activities).

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Department of Labour (e.g. for labour disputes).

2.1.5 Photographic Record

The EO and ECO will be required to compile a photographic record (dated) of all activities on site prior to construction related activities starting, during the construction process and on completion of construction related works. This photographic record will include:

- A pre-construction site record
- Monthly environmental audit reports;
- Weekly environmental monitoring reports;
- Corrective action;
- Progress of environmental works; and
- Incidences of non-conformance.

2.1.6 Waste Manifests

The Contractor shall ensure that all solid (including any hazardous) waste removed from site is disposed of at a registered landfill site or nearby waste transfer station with capacity to accept the project generated waste. The waste manifest shall be kept on record for auditing purposes.

2.1.7 Good Housekeeping

The Contractor is to practice good housekeeping throughout the construction phase. This should eliminate disputes about responsibility, facilitate efficient and timeous running of the project. Over and above practicing accepted construction methods in accordance with SANS 10120, this should include measures to preserve the environment inside the work area. Records of such actions taken to ensure the maintenance and management of housekeeping must be recorded.

The Contractor shall record and report upon environmental management measures undertaken to mitigate assessed impacts upon the environment.

2.1.8 Management and Control

The Contractor is to implement environmental management in a reasonable manner and should such management not prove effective, shall implement measures to the satisfaction of the Project Company. Appropriate measures shall include:

- Appointment of necessary resources to monitor and manage environmental requirements;
- Implement aspect-specific method statements to deal with emergency situations;
- Provision of adequate emergency response equipment to mitigate and manage an incident or

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emergency; and

Provision of specific training related to implementation of environmental management requirements.

2.1.9 Recording and Reporting

The Contractor shall maintain detailed records of parameters monitored. These detailed records shall demonstrate the effectiveness of the management actions implemented to mitigate potential impacts. The Contractor shall submit a monthly database/report of management works implemented to the Project Company, as part of the Contractors monthly report.

2.1.10 Monitoring

The Contractor shall submit an Environmental Monitoring Method Statement which details the scope, nature, process, schedule and templates for environmental monitoring. The monitoring results shall be used to determine the effectiveness of the management programme. All complaints, compliments or other comments relating to environmental management parameters are to be recorded in the site issues register of the Contractor for inclusion in the project issues register held by the Project Company.

Monitoring results and the associated required management and mitigation actions for the coming monitoring period are to be presented in the monitoring section of the Contractors monthly report. The daily and weekly reports are to detail observations and information relating to requested management actions and their effectiveness.

The Contractor shall monitor and maintain the following on an ongoing basis:

- Re-growth of alien invasive vegetation;
- Validity of the pest control officer certificate;
- Fire break requirements associated to construction related activities;
- Storm water systems;
- Topsoil and backfill volumes;
- Access road condition;
- Dust generated from stockpiles;
- Noise;
- Water quality;
- Erosion prevention; and
- Landscaping requirements for rehabilitation.

The Contractor shall submit a monthly database of inter alia the following works to the ECO. This data base is to include as a minimum:

Extent of alien invasive clearing operations;

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- Volumes of herbicide used on the project;
- Stockpile volumes of chipped material, topsoil, fertile soil and subsoil;
- Volume of recyclable waste removed from site;
- Water volumes recycled and used for dust suppression; and
- Maintenance of chemical toilets.

All complaints, compliments or other comments relating to construction related works are to be recorded by the Contractor in the communications register of the receiving party for inclusion in the project issues register. Site clearance monitoring results and the associated required management and mitigation actions for the coming monitoring period are to be presented in the monitoring section of the Contractors monthly report. The weekly reports are to detail observations and information relating to requested management actions and their effectiveness.

2.2 Compliance with the EMPr

The Contractor/s is/are deemed not to have complied with the EMPr if:

- Within the boundaries of the site, site extensions and access roads there is evidence of contravention of clauses;
- If environmental damage ensues due to negligence;
- The contractor fails to comply with corrective or other instructions issued by the ECO or Authorities within a specified time; and
- The Contractor fails to respond adequately to complaints from the public.

The Project Company is deemed not to have complied with the EMPr if:

- Within the boundaries of the site there is evidence of contravention of clauses;
- If environmental damage ensues due to negligence; and
- They fail to respond adequately to complaints from the public.

2.2.1 Non-Conformance Report

A Non-Conformance Report (NCR) will be issued to the Contractor as a final step towards rectifying a failure in complying with a requirement of the EMPr. This will be issued to the Contractor in writing. Preceding the issuing of the NCR, the Contractor will be presented with an opportunity to rectify the outstanding issue in a timely manner.

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Preceding requirements to the submitting of the NCR will entail an issue that has been highlighted to the Contractor in the audits for corrective action. Should this issue not be corrected or completed to the satisfaction of the Project Company and ECO, the issue is escalated to an NCR.

Should the ECO assess an incident / issue and find it to be significant (e.g. non-repairable damage upon the environment), it will be reported to the DEA and immediately escalated to the level of an NCR. This will be done in consultation with the Project Company. The following information should be recorded in the NCR:

- Details of non-conformance:
- Any plant or equipment involved;
- Any chemicals or hazardous substances involved;
- Work procedures not followed;
- Any other physical aspects;
- Nature of the risk;
- Actions agreed to by all parties following consultation that should adequately address the identified non-conformance. This may take the form of specific control measures and should take the hierarchy of controls into account. This must accompany the NCR for filing purposes;
- The agreed timeframe by which the Contractor should have implemented the actions documented in the NCR; and
- The ECO should verify that the agreed actions have taken place on or soon after the agreed completion date. Where the actions are complete, the ECO and Contractor should sign the Close Out portion of the Non-Conformance Form and file it with the contract documentation.

2.2.2 Environmental Emergency Response

The Contractor's environmental emergency procedures must ensure that there will be an appropriate response to unexpected or accidental actions or incidents that could cause environmental impacts. Such incidents may include:

- Accidental discharges to water (i.e. into a water resource) and land;
- Accidental spillage of hazardous substances (typically oil, petrol, and diesel);
- Accidental toxic emissions into the air;
- Specific environmental and ecosystem effects from accidental releases or incidents;
- The Environmental Emergency Response Plan is separate to the Health and Safety Plan as it is aimed at responding to environmental incidents and must ensure and include the following:
 - Construction employees shall be adequately trained in terms of incidents and emergency situations:
 - Details of the organisation (manpower) and responsibilities, accountability and liability of personnel;
 - A list of key personnel and contact numbers;
 - Details of emergency services (e.g. the fire department, spill cleanup services) shall be listed;

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- o Internal and external communication plans, including prescribed reporting procedures;
- o Actions to be taken in the event of different types of emergencies;
- o Incident recording, progress reporting and remediation measures to be implemented; and
- o Information on hazardous materials, including the potential impact associated with each, and measures to be taken in the event of accidental release.

The Contractor(s) will comply with the environmental emergency preparedness and incident and accident-reporting requirements, as required by the Occupational Health and Safety Act (Act No. 85 of 1993), the National Environmental Management Act (Act No. 107 of 1998), the National Water Act (Act No. 36 of 1998), and/or any other relevant legislation.

2.2.3 Non-compliance

Non-conformance will be issued to the Contractor for incidents of non-compliance. The Contractor (through the Environmental Officer) shall also take the necessary steps (e.g. training) to prevent a recurrence of the infringement. The Contractor is also advised that the imposition of non-conformance does not replace any legal proceedings the authorities, landowners and/or members of the public may institute against the Contractor. The Contractor shall be required to make good any damage caused as a result of the infringement at his own expense. A preliminary list of infringements for which non-conformance will be imposed is as follows:

- Using areas outside the working areas without permission/accessing "no-go areas";
- Clearing and/or leveling area outside of the working areas;
- Littering on the site and surrounds;
- Burying/burning waste on site and surrounds;
- The undertaking of informal ablutions
- Making fires on site;
- Spillage onto the ground or water bodies of oil, diesel, or any other potential pollutants;
- Picking/damaging plant material, especially that from the residual areas of natural bush on the site;
- Damaging/killing wild or domestic animals/birds;
- Discharging effluent and/or storm water onto the ground or into surface water:
- Repeated contravention of the specification or failure to comply with instruction;
- Mixing cement directly on soil or bare ground outside designated batching plant;
- Keeping animals as pets on site.

The Senior Site Supervisor, on recommendation from the ECO, may also order the Contractor to suspend part or all the works if the Contractor repeatedly causes damage to the environment by not adhering to the EMPr (i.e. more than 3 cases of infringements). The suspension will be enforced until such time as the offending actions, procedure or equipment is corrected. No extension of time will be granted for such delays and all costs will be borne by the Contractor.

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2.2.3.1 Contractor performance

The Main Contractor must ensure that the conditions of the EMPr are adhered to. Should the Main Contractor require clarity on any aspect of the EMPr, the Main Contractor must contact the Environmental Control Officer for advice.

3 MITIGATION GUIDELINES

3.1 Introduction

Mitigation guidelines are addressed through four phases namely Pre-construction (Site Establishment) Phase; Construction Phase (and associated rehabilitation of affected environment); Operational Phase (Post-Construction) as well as Decommissioning Phase. Each phase has specific issues unique to that period of the development and operation of the wind energy facility and the associated infrastructure. The impact is identified and given a brief description. The four phases of the development are then identified as below:

3.2 Pre-construction (Site Establishment)

Requirements for the pre-construction phase

- Proper and continuous liaison between the ECO, the Contractor and Landowners to ensure all
 parties are appropriately informed at all times.
- The Contractor must adhere to all conditions of the contract including the Environmental Management Programme.
- Adequate planning of the construction programme to allow for disruptions due to rain and very wet conditions.
- Where existing private roads are in a bad state of repair, such roads' condition shall be documented before they are used for construction purposes. This will allow for easy assessment of any damage to the roads which may result from the construction process. If necessary, some repairs should be done to prevent damage to equipment. All roads no matter what the condition need to be documented prior to construction.
- Proper documentation and record keeping of all complaints and actions taken.
- Appointment of an Environmental Control Officer to implement this EMPr.
- Regular site inspections by the ECO and good control over the construction process throughout the construction period.
- Independent Environmental Audits to be carried out during and upon completion of construction.

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A formal communications protocol should be set up during the construction phase. The aim of the protocol should be to ensure that effective communication on key issues that may arise during this phase be maintained between key parties such as the ECO, project manager and contractor. The protocol should also ensure that concerns / issues raised by I&APs are formally recorded and considered and where necessary acted upon. If necessary, a forum for communicating with key stakeholders on a regular basis may need to be set up. This could be done through an Environmental Monitoring Committee that would meet on a regular basis. The communications protocol should be maintained throughout the construction phase.

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3.3 Pre-Construction Phase

3.3.1 Site preparation

Table 7: Site preparation

IMPACT	SITE PREPARATION	RESPONSIBILITY
	This section deals with the preparation of the site and actions that need to be implemented	
	before construction commences	
PHASE	SITE ESTABLISHMENT	MC, EO, ECO
ENVIRONMENTAL MA	NAGEMENT PROGRAMME	
MITIGATION /	Appoint construction team and suitable manager	
METHOD	1. Appoint an Environmental Control Officer and Environmental Officer. The EO is from the	
STATEMENT	contractor's side while the ECO is from the client's side.	
	Site demarcation and compliance	
	2. Before construction begins, all areas to be developed must be clearly demarcated with fencing or orange construction barrier where applicable.	
	3. All Construction Camps are to be fenced off in such a manner that unlawful entry is prevented	
	and access is controlled. Signage shall be erected at all access points in compliance with all	
	applicable occupational health and safety requirements. All access points to the Construction	
	Camp should be controlled by a guard or otherwise monitored, to prevent unlawful access.	
	4. The contractor and ECO must ensure compliance with conditions described in the EA.	
	5. Records of compliance/ non-compliance with the conditions of the authorisation must be kept and be available on request.	
	6. Records of all environmental incidents must be maintained and a copy of these records be made available to the national and provincial departments on request throughout the project execution.	

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Construction Camp

- 7. Site establishment shall take place in an orderly manner and all required amenities shall be installed at camp sites before the main workforce move onto site.
- 8. All construction equipment must be stored within this construction camp.
- 9. All associated oil changes etc. (no servicing) must take place within this camp over a sealed surface such as a concrete slab.
- 10. An area for the storage of hazardous materials must be established that conforms to the relevant safety requirements and that provides for spillage prevention and containment.
- 11. All Construction Camps shall be provided with portable fire extinguishing equipment, in accordance with all relevant legislation and must be readily accessible.
- 12. The Contractor must provide sufficient ablution facilities, in the form of portable / VIP toilets, at the Construction Camps, and shall conform to all relevant health and safety standards and codes. No pit latrines, French drain systems or soak away systems shall be allowed and toilets may not be situated within 100 meters of any surface water body or 1:100 year flood line. A sufficient number of toilets shall be provided to accommodate the number of personnel working in the area.
- 13. The Contractor shall inform all site staff to make use of supplied ablution facilities and under no circumstances shall indiscriminate sanitary activities be allowed.
- 14. No fires will be allowed and the Contractor must make alternative arrangements for heating. LP Gas may be used, provided that all required safety measures are in place. The Contractor shall take specific measures to prevent the spread of veld fires, caused by activities at the campsites. These measures may include appropriate instruction of employees about fire risks.

Labour

15. All unskilled labourers for pre-site construction should be drawn from the local market and where possible use should be made of local semiskilled and skilled personnel.

Training of site staff

16. Environmental awareness training for construction staff, concerning the prevention of accidental spillage of hazardous chemicals and oil; pollution of water resources (both surface and groundwater), air pollution and litter control and identification of archaeological artefacts.

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- 17. Project Manager shall ensure that the training and capabilities of the Contractor's site staff are adequate to carry out the designated tasks.
- 18. Staff operating equipment (such as loaders, etc.) shall be adequately trained and sensitised to any potential hazards associated with their tasks.
- 19. No operator shall be permitted to operate critical items of mechanical equipment without having been trained by the Contractor and certified competent by the Project Manager.
- 20. Staff should be educated as to the need to refrain from indiscriminate waste disposal and/or pollution of local soil and water resources and receive the necessary safety training.
- 21. Staff must be trained in the hazards and required precautionary measures for dealing with these substances
- 22. Spillage packs must be available at construction areas.

SPECIFIC MITIGATION MEASURES

- 23. A pre-construction walk-through survey by the biodiversity specialist will be required during a favourable season to locate any protected plants / trees and/or sensitive species and/or ecological feature. This survey must cover the footprint of all proposed infrastructure, including internal access roads. If necessary, shift infrastructure to avoid impacts on species or specific features.
- 24. Protected tree species should be avoided as far as possible, however, where such trees cannot be avoided, a Forest Act License must be applied for and obtained prior to any disturbance.
- 25. The location of the lay-down area must not be within 50m of any of the identified surface water resources. Additionally, the storage of materials and machinery must also not be within 50m of any of the identified surface water resources.
- 26. Operational fire extinguishers are to be available in the case of a fire emergency. Given the dry seasons that the region experiences, it is recommended that a fire management and emergency plan compiled by a suitably qualified health and safety officer be compiled and implemented for the proposed development.
- 27. A walk-through survey by the heritage specialist of the final approved layout will be required before construction commences.

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- 28. Any heritage features of significance identified during this walk down will require formal mitigation, permits if required or where possible a slight change in design could accommodate such resources.
- 29. An HIA report must be submitted to SAHRA upon the completion of the walk down of the final layout prior to construction. The HIA must include the results of the walk down and must be submitted to SAHRA for comment prior to construction. No construction activities may commence without comments from SAHRA.
- 30. A Heritage Management Plan (HMP) must be compiled and submitted to SAHRA prior to the construction phase for approval. The HMP must include monitoring and reporting procedures during all phases of the project.
- 31. The alien / invasive plant management report, plant recue and protection report, re-vegetation and habitat rehabilitation report must be available to the Department of Environmental Affairs and applicable competent authorities on request.

3.3.2 Consultation

Table 8: Consultation

IMPACT	CONSULTATION	RESPONSIBILITY
	This section deals with the public consultation of the site and actions that need to be	
	implemented before construction commences	
PHASE	PRE-CONSTRUCTION	MC, CLO
ENVIRONMENTAL MANA	GEMENT PROGRAMME	
MITIGATION / METHOD	Consultation	
STATEMENT	1. Provide a mechanism through which information could be exchanged between the project proponent and stakeholders.	
	Identify relevant stakeholders and engage them at applicable stages of the construction process.	

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- 3. Inform the public about the proposed construction process.
- 4. Surrounding communities must be kept informed, through the identified and agreed consultation channels, of the commencement of construction.
- 5. Solicit views and concerns from the public and allow them to suggest mitigations and enhancement measures
- Determine stakeholder satisfaction levels.

SPECIFIC MITIGATION MEASURES

- 7. Locals should be informed upfront about employment opportunities so that there are no unrealistic expectations on the part of the community.
- 8. Ensure clear communication of the project information and effective public participation processes to minimise the influx of migrant job seekers.
- Prior construction, rules and regulations regarding presence of construction workers on site must be devised in consultation with the land owners of directly affected and adjacent properties.
- 10. Engage with local municipality to discuss the potential impact on local road quality and the possible mitigation measures.
- 11. Ensure effective communication of the project information throughout all stages to effectively manage expectations of local communities, local authorities and local land owners.
- 12. On-going consultation with the municipality to prepare local authorities for the activity and the increase demands for public services and affordable housing that may result from this.
- 13. The previous Palaeontological Desktop Study as referenced in Interim Comments issued on 18/01/2017 must be resubmitted to the case file for record keeping purposes. Reports that have been commented on should not be removed from the case file without the case officer permission.
- 14. Proof of the submission of and receipt of all SAHRA comments to the Department of Environmental Affairs (DEA) must be submitted to the case file.
- 15. If the development receives an amended EA, SAHRA must be informed and all documents pertaining to the amended EA must be uploaded to the SAHRIS Case file.

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- 16. Any additions, amendments, additional structures to be built, or any change to the energy farm boundaries, will require a new application for approval to SENTECH.
- 17. The validity of the SENTECH approval is for a period of 12 (twelve) months. If construction of the designed project commences after the expiry of the twelve (12) month period, the application for approval must be re-submitted to SENTECH for further evaluation and approval.
- 18. The project company must notify and meet all affected stakeholders' requirements and interests on proposed development.
- 19. Any alterations and/or additional proposals post the Northern Cape Department of Roads and Public Works' response letter dated 04 July 2019 must be communicated to the Department for approval prior to any execution.
- 20. The project company must obtain the necessary statutory, land owner or municipal approvals.
- 21. The use of explosives of any type within 500m of Eskom's services shall only occur with Eskom's previous written permission. If such permission is granted the developer must give at least fourteen working days' prior notice of the commencement of blasting. This allows time for arrangements to be made for supervision and/or precautionary instructions to be issued in terms of the blasting process. It is advisable to make application separately in this regard.
- 22. No mechanical equipment, including mechanical excavators or high lifting machinery, shall be used in the vicinity of Eskom's apparatus and/or services, without prior written permission having been granted by Eskom. If such permission is granted the developer must give at least seven working days' notice prior to the commencement of work. This allows time for arrangements to be made for supervision and/or precautionary instructions to be issued by the relevant Eskom Manager. Where and electrical outage is required, at least fourteen work days are required to arrange it.

3.3.3 Site Clearing

Table 9: Site Clearing

IMPACT	SITE CLEARING	RESPONSIBILITY
	This section deals with site clearing and actions that need to be implemented before	
	construction commences	
PHASE	PRE-CONSTRUCTION	MC, EO, ECO
ENVIRONMENTAL MANA	GEMENT PROGRAMME	
MITIGATION / METHOD	Site clearing	
STATEMENT	1. Site clearing must take place in a phased manner, as and when required.	
	2. Areas which are not to be constructed on within two months must not be cleared to reduce erosion risks.	
	3. The area to be cleared must be clearly demarcated and this footprint strictly maintained.	
	4. Spoil that is removed from the site must be removed to an approved spoil site or a licensed landfill site.	
	5. The necessary silt fences and erosion control measures must be implemented in areas where these risks are more prevalent.	

3.3.4 Social and Environmental Management Systems

Table 10: Social and Environmental Management Systems

IMPACT	SOCIAL AND ENVIRONMENTAL MANAGEMENT SYSTEMS	RESPO	NSIBILITY
	This section deals with the Social and Environmental Management Systems and actions		
	that need to be implemented before construction commences		
PHASE	SITE ESTABLISHMENT	MC,	PROJECT
		COMPANY	
ENVIRONMENTAL MANAGEMENT PROGRAMME			

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MITIGATION / METHOD	Social	
STATEMENT	1. Performance Standard One underscores the importance of managing social and	
	environmental performance throughout the life of a project.	
	2. An effective social and environmental management system is a dynamic, continuous process	
	initiated by management and involving communication between the client, its workers and	
	the local communities directly affected by the project.	
	3. The client will establish and maintain a Social and Environmental Management System,	
	appropriate to the nature and scale of the project and commensurate to the level of social	
	and environmental risks and impacts. The management system will incorporate the following	
	elements:	
	Social and Environmental Assessment	
	○ Management program	
	Organizational capacity	
	○ Training	
	○ Community Engagement	
	Monitoring and Reporting	
SPECIFIC MITIGATION MEASURES		
	4. Any cost incurred by Eskom as a result of non-compliance to any relevant environmental	
	legislation will be charged to the project company and/or appointed contractor.	

3.4 Construction Phase

3.4.1 Construction Camp

Table 11: Construction Camp

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	This section deals with construction camp (equipment and batching camp) and actions	
	that need to be implemented during construction	
PHASE	CONSTRUCTION	MC/EO/ECO
ENVIRONMENTAL MAN	IAGEMENT PROGRAMME	•
MITIGATION / METHO	D Site of construction camp	
STATEMENT	1. The size of the construction camp must be minimized.	
	2. Adequate parking must be provided for site staff and visitors. The Contractor must attend to	
	drainage of the camp site to avoid standing water and / or sheet erosion.	
	3. Suitable control measures over the Contractor's yard, facility and material storage to mitigate	
	any visual impact of the construction activity must be implemented.	
	Storage of materials (including hazardous materials)	
	4. Choice of location for storage areas must take into account prevailing winds, distances to	
	water bodies, general onsite topography and water erosion potential of the soil. Impervious	
	surfaces must be provided where necessary.	
	5. Storage areas must be designated, demarcated and fenced if necessary.	
	6. Storage areas should be secure so as to minimize the risk of crime. They should also be safe	
	from access by unauthorised persons i.e. children / animals etc.	
	7. Fire prevention facilities must be present at all storage facilities.	
	8. Proper storage facilities for the storage of oils, paints, grease, fuels, chemicals and any	
	hazardous materials to be used must be provided to prevent the migration of spillage into the	
	ground and groundwater regime around the temporary storage area(s). These pollution	
	prevention measures for storage must include a bund wall high enough to contain at least	
	110% of any stored volume, and this must be sited away from drainage lines in a site with	
	the approval of the Project Manager. The bund wall must be high enough to contain 110%	
	of the total volume of the stored hazardous material with an additional allocation for potential	
	storm water events.	
	9. All fuel storage areas must be roofed to avoid creation of dirty storm water.	

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- 10. These storage facilities (including any tanks) must be on an impermeable surface that is protected from the ingress of storm water from surrounding areas and that will not infiltrate into the ground in order to ensure that accidental spillage does not pollute local soil or water resources.
- 11. Material Safety Data Sheets (MSDSs) shall be readily available on site for all chemicals to be used on site. Where possible the available, MSDS's must additionally include information on ecological impacts and measures to minimise negative environmental impacts during accidental releases or escapes.
- 12. Storage areas containing chemical substances / materials must be clearly sign posted.
- 13. Staff dealing with these materials / substances must be aware of their potential impacts and follow the appropriate safety measures.
- 14. An approved waste disposal contractor must be employed to remove and recycle waste oil, if practical. The contractor must ensure that its staff is made aware of the health risks associated with any hazardous substances used and has been provided with the appropriate protective clothing/equipment in case of spillages or accidents and have received the necessary training.
- 15. All excess cement and concrete mixes are to be contained on the construction site prior to disposal off site.
- 16. All major spills as specified in the contractor emergency response procedure of any materials, chemicals, fuels or other potentially hazardous or pollutant substances must be cleaned immediately and the cause of the spill investigated. Preventative measures must be identified and submitted to the MC and ECO for information. Emergency response procedures to be followed and implemented.

Drainage of construction camp

- 17. Surface drainage measures must be established in the Construction Camps so as to prevent
 - Ponding of water;
 - Erosion as a result of accelerated runoff; and,
 - Uncontrolled discharge of polluted runoff.

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Table 12: Construction Traffic and Access

IMPACT	CONSTRUCTION TRAFFIC AND ACCESS	RESPONSIBILITY
	This section deals with construction traffic and access and actions that need to be	
	implemented during construction	
PHASE	CONSTRUCTION	MC, EO, EO
ENVIRONMENTAL MANA	GEMENT PROGRAMME	
MITIGATION / METHOD	Construction traffic	
STATEMENT	Construction routes and required access roads must be clearly defined.	
	2. Recommendations of the storm water management plan must be implemented.	
	3. Delivery of equipment must be undertaken with the minimum amount of trips to reduce the carbon footprint of these activities	
	4. Access of all construction and material delivery vehicles should be strictly controlled, especially during wet weather to avoid compaction and damage to the topsoil structure.	
	5. Damping down of the un-surfaced roads must be implemented to reduce dust and nuisance.	
	6. Vehicles and equipment shall be serviced regularly to avoid the contamination of soil from oil and hydraulic fluid leaks etc.	
	7. Servicing must be done in dedicated service areas on site or else off site if no such area exists.	
	8. Oil changes must take place on a concrete platform and over a drip tray to avoid pollution.	
	 Soils compacted by construction shall be deep ripped to loosen compacted layers and re- graded to even running levels. 	
	Access	
	10. The main routes on the site must be clearly sign posted and printed delivery maps must be issued to all suppliers and Sub-contractors.	
	11. Planning of access routes to the site for construction purposes shall be done in conjunction with the Contractor and the Landowner. All agreements reached should be documented and	

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no verbal agreements should be made. The Contractor shall clearly mark all access roads. Roads not to be used shall be marked with a "NO ENTRY for construction vehicles" sign.

12. Access to the site must be via secondary roads as requested by SANRAL.

Road maintenance

- 13. Where necessary suitable measures shall be taken to rehabilitate damaged areas.
- 14. Contractors should ensure that access roads are maintained in good condition by attending to potholes, corrugations and storm water damages as soon as these develop.
- 15. If necessary, staff must be employed to clean surfaced roads adjacent to construction sites where materials have spilt.
- 16. Recommendations of the surface water report must be taken into consideration.

General

- 17. The contractor shall meet safety requirements under all circumstances. All equipment transported shall be clearly labelled as to their potential hazards according to specifications. All the required safety labelling on the containers and trucks used shall be in place.
- 18. The Contractor shall ensure that all the necessary precautions against damage to the environment and injury to persons are taken.
- 19. Care for the safety and security of community members crossing access roads should receive priority at all times.

SPECIFIC MITIGATION MEASURES

- 20. One ERF/property will only be allowed one access from the MR771 public road.
- 21. The conditions of the wayleave from the Northern Cape Department of Roads and Public Works are applicable to the owner as well as the successor-in-title. If property rights transferred to any other person or institution, the onus will be on the project company to bring contents of this wayleave to the attention of your successor-in-title as the conditions of this response letter along with your property rights will be transferred to the successor-in-title and will still be applicable.
- 22. No outdoor advertising is permitted on a fence or within 500m from the public road.

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- 23. The Northern Cape Department of Roads and Public Works' response letter dated 04 July 2019 does not exempt the project company from complying with any other law that may be applicable to the proposed work and related activities.
- 24. Eskom must at all times retain unobstructed access to and egress from its servitudes.
- 25. If Eskom has to incur any expenditure in order to comply with statutory clearances or other regulations as a result of the developer's activities or because of the presence of his equipment or installation within the servitude restriction area, the project company shall pay such costs to Eskom on demand.
- 26. No mechanical equipment, including mechanical excavators or high lifting machinery, shall be used in the vicinity of Eskom's apparatus and/or services, without prior written permission having been granted by Eskom. If such permission is granted the developer must give at least seven working days' notice prior to the commencement of work. This allows time for arrangements to be made for supervision and/or precautionary instructions to be issued by the relevant Eskom Manager. Where and electrical outage is required, at least fourteen work days are required to arrange it.
- 27. Eskom's rights and duties in the servitude shall be accepted as having prior right at all times and shall not be obstructed or interfered with.
- 28. Under no circumstances shall rubble, earth or other material be dumped within the servitude restriction area. The project company and/or appointed contractor shall maintain the area concerned to Eskom's satisfaction. The project company and/or appointed contractor shall be liable to Eskom for the cost of any remedial action which has to be carried out by Eskom.
- 29. Any third party servitudes encroaching on Eskom servitudes shall be registered against Eskom's title deed at the project company and/or appointed contractor's own cost. If such a servitude is brought into being, its existence should be endorsed on the Eskom servitude deed concerned, while the third party's servitude deed must also include the rights of the affected Eskom servitude.

Table 13: Environmental Education and Training

IMPACT	ENVIRONMENTAL EDUCATION AND TRAINING	RESPONSIBILITY
	This section deals with the environmental training of construction employees who will	
	work at the proposed energy facility	
PHASE	CONSTRUCTION	PROJECT
		COMPANY, PM, EO,
		ECO
ENVIRONMENTAL MANA	GEMENT PROGRAMME	
MITIGATION / METHOD	Environmental training	
STATEMENT	The project company must appoint an ECO prior to construction.	
	2. Ensure that all site personnel have a basic level of environmental awareness training. The	
	ECO will be responsible for the training. Topics covered should include:	
	What is meant by "Environment"	
	 Why the environment needs to be protected and conserved 	
	 How construction activities can impact on the environment 	
	 What can be done to mitigate against such impacts 	
	 Awareness of emergency and spills response provisions 	
	 Social responsibility during construction e.g. being considerate to local residents 	
	3. Training should be undertaken by a party such as the ECO who has sufficient expertise and knowledge of environmental issues.	
	4. It is the Contractor's responsibility to provide the site foreman with no less than 1 hour's	
	environmental training and to ensure that the foreman has sufficient understanding to pass	
	this information onto the construction staff.	
	5. Training should be provided to the staff members in the use of the appropriate fire-fighting	
	equipment. Translators are to be used where necessary.	
	6. Use should be made of environmental awareness posters on site.	
	7. The need for a "clean site" policy also needs to be explained to the workers.	

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8. Staff operating equipment (such as loaders, etc.) shall be adequately trained and sensitized to any potential hazards associated with their tasks.
Monitoring of environmental training 9. The Contractor must monitor the performance of construction workers to ensure that the points relayed during their introduction have been properly understood and are being followed. If necessary, the ECO and / or a translator should be called to the site to further explain aspects of environmental or social behaviour that are unclear. Toolbox talks are recommended.

3.4.4 Soils and Geology

General guidelines for management of soils are provided in Annexure B

Table 14: Soils and Geology

IMPACT	SOILS AND GEOLOGY	RESPONSIBILITY
	This section deals with soils and geology and actions that need to be implemented during	
	construction	
PHASE	CONSTRUCTION	MC, EO, ECO
ENVIRONMENTAL MANA	GEMENT PROGRAMME	
MITIGATION / METHOD	Topsoil	
STATEMENT	 The contractor should, prior to the commencement of earthworks determine the average depth of topsoil (if any), and agree on this with the ECO. The full depth of topsoil should be stripped from areas affected by construction and related activities prior to the commencement of foundations. This should include the building footprints, working areas and storage areas. Topsoil must be reused where possible to rehabilitate disturbed surface areas. Care must be taken not to mix topsoil and subsoil during stripping. 	

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- 3. Should any topsoil become polluted the contractor must remove the polluted soil to the full depth of pollution and replace it at his own expense with clean topsoil.
- 4. Removed polluted topsoil should be transported to a licensed landfill site.
- 5. The topsoil must be conserved on site in and round the pit area

Soil Stripping

- 6. No soil stripping must take place on areas within the site that the contractor does not require for construction works or areas of retained vegetation.
- Subsoil and overburden in all construction and lay down areas should be stockpiled separately to be returned for backfilling in the correct soil horizon order.
- 8. Construction vehicles must only be allowed to utilize existing tracks or pre-planned access routes.

Soil Stockpiles

- 9. Stockpiles should not be situated such that they obstruct natural water pathways.
- 10. Stockpiles should not exceed 2m in height unless otherwise permitted by the Engineer.
- 11. If stockpiles are exposed to windy conditions or heavy rain, they should be covered either by vegetation or geofabric, depending on the duration of the project. Stockpiles may further be protected by the construction of berms or low brick walls around their bases.
- 12. Stockpiles should be kept clear of weeds and alien vegetation growth by regular weeding.
- 13. Where contamination of soil is expected, analysis must be done prior to disposal of soil to determine the appropriate disposal route. Proof from an approved waste disposal site where contaminated soils are dumped if and when a spillage / leakage occurs should be attained and given to the project manager.

Fuel storage

- 14. Topsoil and subsoil to be protected from contamination. This should be monitored on a monthly basis by a visual inspection of diesel/oil spillage and pollution prevention facilities.
- 15. Fuel and material storage must be away from stockpiles.

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16. Concrete and chemicals must be mixed on an impervious surface and provisions should be			
made to contain spillages or overflows into the soil.			
17. Any storage tanks containing hazardous materials must be placed in bunded containment			
areas with sealed surfaces. The bund walls must be high enough to contain 110% of the total			
volume of the stored hazardous material.			
Concrete mixing			
18. Should a concrete batching plant be required, it must be contained within a bunded area.	Main	contractor	/
19. Concrete mixing must only take place within designated areas.	ECO		
20. Ready mixed concrete must be utilised where possible.			
21. No vehicles transporting concrete to the site may be washed on site.			
22. If a batching plant is necessary, run-off should be managed effectively to avoid contamination			
of other areas of the site. Run-off from the batch plant must not be allowed to enter the storm			
water system.			
Earthworks			
23. Soils compacted during construction should be deeply ripped to loosen compacted layers			
and re-graded to even running levels. Topsoil should be re-spread over landscaped areas.			
According to specifications by a landscape architect, the area should be re-vegetated upon			
completion of construction activities.			
			_
SPECIFIC MITIGATION MEASURES			
24. Ensure that the minimum area possible is set aside for the project infrastructure, so that the			
natural vegetation is undisturbed and grazing of livestock can continue on site post-			
construction.			
25. If bare topsoil results, it should be covered by a soil protection layer, such as a geotextile, to			

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26. Regular communication between responsible officials at all sites in the vicinity is essential.

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stabilise the site until vegetation can re-establish.

27. If possible, project managers from other proposed renewable energy facilities should	
maintain regular communication in order to minimise the effect of wind erosion.	
28. Regular monitoring (at least monthly during any construction phase and approximately six-	
monthly thereafter is strongly recommended to pick up any potential problems before they	
arise.	
29. Changes in ground level may not infringe statutory ground to conductor clearances or	
statutory visibility clearances.	

3.4.5 Erosion Control

Table 15: Erosion Control

IMPACT	EROSION CONTROL	RESPONSIBILITY
	This section deals with erosion and actions that need to be implemented during	
	construction	
PHASE	CONSTRUCTION	MC, EO, ECO
ENVIRONMENTAL MANA	GEMENT PROGRAMME	
MITIGATION / METHOD	1. Wind screening and storm water control should be undertaken to prevent soil loss from the	
STATEMENT	site.	
	2. The use of silt fences and sand bags must be implemented in areas that are susceptible to	
	erosion.	
	3. Other erosion control measures that can be implemented are as follows:	
	 Brush packing with cleared vegetation 	
	Mulch or chip packing	
	Planting of vegetation	
	Hydroseeding / hand sowing	
	4. Sensitive areas need to be identified prior to construction so that the necessary precautions	
	can be implemented.	
	5. All erosion control mechanisms need to be regularly maintained.	

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 6. Seeding of topsoil and subsoil stockpiles to prevent wind and water erosion of soil surfaces. 7. Retention of vegetation where possible to avoid soil erosion 8. Vegetation clearance should be phased to ensure that the minimum area of soil is exposed to potential erosion at any one time.
8. Vegetation clearance should be phased to ensure that the minimum area of soil is exposed
to potential erosion at any one time.
9. Re-vegetation of disturbed surfaces should occur immediately after construction activities
are completed. This should be done through seeding with indigenous grasses that were
present on the site prior to construction.
10. No impediment to the natural water flow other than approved erosion control works is
permitted.
11. To prevent storm water damage, the increase in storm water run-off resulting from
construction activities must be estimated and the drainage system assessed accordingly.
12. Stockpiles not used in three (3) months after stripping must be seeded to prevent dust and
erosion.
SPECIFIC MITIGATION MEASURES
30. Prevent erosion impacts on drainage systems.
31. After any changes in ground level, the surface must be rehabilitated and stabilised so as to
prevent erosion. The measures taken must be to Eskom's satisfaction.

3.4.6 Water Use and Quality

Table 16: Water Use and Quality

IMPACT	WATER USE AND QUALITY	RESPONSIBILITY
	This section deals with water use and quality as well as actions that need to be	
	implemented during construction	
PHASE	CONSTRUCTION	MC, ECO, EO, CLO
MITIGATION / METHOD	Water Use	
STATEMENT	 Develop a sustainable water supply management plan to minimize the impact to natural systems by managing water use, avoiding depletion of aquifers and minimizing impacts to water users. Water must be reused, recycled or treated where possible. Consultation with key stakeholders to understand any conflicting water use demands and the community's dependency on water resources and conservation requirements within the area. 	Engineer
	 Water Quality The quality and quantity of effluent streams discharged to the environment including storm water should be managed and treated to meet applicable effluent discharge guidelines. Efficient oil and grease traps or sumps should be installed and maintained at refuelling facilities, workshops, fuel storage depots, and containment areas and spill kits should be available with emergency response plans. 	ECO, MC
	 Storm water 6. The site must be managed in order to prevent pollution of drains, downstream watercourses or groundwater, due to suspended solids and silt or chemical pollutants. 7. Silt fences should be used to prevent any soil entering the storm water drains. 8. Temporary cut off drains and berms may be required to capture storm water and promote infiltration. 	Contractor

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- Promote a water saving mind set with construction workers in order to ensure less water wastage.
- 10. New storm water systems must be developed strictly according to specifications from engineers in order to ensure efficiency.
- 11. Hazardous substances (fuel) must be stored at least 100m from any water bodies on site to avoid pollution.
- 12. The installation of the storm water system must take place as soon as possible to attenuate storm water from the construction phase as well as the operation phase.
- 13. Earth, stone and rubble is to be properly disposed of, or utilized on site so as not to obstruct natural water path ways over the site. i.e. these materials must not be placed in storm water channels, drainage lines or rivers.
- 14. There should be a periodic checking of the site's drainage system to ensure that the water flow is unobstructed.
- 15. If a batching plant is necessary, run-off should be managed effectively to avoid contamination of other areas of the site. Untreated runoff from the batch plant must not be allowed to get into the storm water system or nearby streams, rivers or erosion channels or dongas.

Sanitation

- 16. Adequate sanitary facilities and ablutions must be provided for construction workers (1 toilet per every 15 workers).
- 17. The facilities must be regularly serviced to reduce the risk of surface or groundwater pollution.

Concrete mixing

18. Concrete contaminated water must not enter soil or any natural drainage system as this disturbs the natural acidity of the soil and affects plant growth.

Public areas

19. Food preparation areas should be provided with adequate washing facilities and food refuse should be stored in sealed refuse bins which should be removed from site on a regular basis.

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20. The contractor should take steps to ensure that littering by construction workers does not	
occur and persons should be employed on site to collect litter from the site and immediate	
surroundings, including litter accumulating at fence lines.	
21. No washing or servicing of vehicles on site.	

3.4.7 Surface and Groundwater

Table 17: Surface and Groundwater

IMPACT	SURFACE WATER AND GROUNDWATER	RESPONSIBILITY
	This section deals with surface and groundwater and actions that need to be implemented	
	during construction	
PHASE	CONSTRUCTION	MC, ECO, EO
ENVIRONMENTAL MANA	GEMENT PROGRAMME	
MITIGATION / METHOD	Sanitation	
STATEMENT	Adequate sanitary facilities and ablutions must be provided for construction workers (1 toilet per every 15 workers).	
	2. The facilities must be regularly serviced to reduce the risk of surface or groundwater pollution.	
	Hazardous materials	
	3. Use and or storage of materials, fuel and chemicals which could potentially leak into the ground must be controlled.	
	4. All storage tanks containing hazardous materials must be placed in bunded containment areas with sealed surfaces. The bund walls must be high enough to contain 110% of the total volume of the stored hazardous material.	
	5. Any hazardous substances must be stored at least 20m from any of the water bodies on site.	

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- 6. The Contractor (monitored by the ECO or EO) should be responsible for ensuring that potentially harmful materials are properly stored in a dry, secure, ventilated environment, with concrete or sealed flooring and a means of preventing unauthorised entry.
- 7. Contaminated wastewater must be managed by the Contractor to ensure existing water resources on the site are not contaminated. All wastewater from general activities in the camp shall be collected and removed from the site for appropriate disposal at a licensed commercial facility.

Concrete mixing

8. Concrete contaminated water must not enter soil or any natural drainage system as this disturbs the natural acidity of the soil and affects plant growth

Public areas

- 9. Food preparation areas should be provided with adequate washing facilities and food refuse should be stored in sealed refuse bins which should be removed from site on a regular basis.
- 10. The contractor should take steps to ensure that littering by construction workers does not occur and persons should be employed on site to collect litter from the site and immediate surroundings, including litter accumulating at fence lines.
- 11. No washing or servicing of vehicles on site.

Water resources

- 12. Site staff shall not be permitted to use any other open water body or natural water source adjacent to or within the designated site for the purposes of bathing, washing of clothing or for any construction or related activities.
- 13. Municipal water (or another source approved by the ECO) should instead be used for all activities such as washing of equipment or disposal of any type of waste, dust suppression, concrete mixing, compacting, etc.
- 14. Relevant departments and other emergency services should be contacted in order to deal with spillages and contamination of aquatic environments.

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SPECIFIC MITIGATION MEASURES

- 15. Surface water resources are to be designated as "highly sensitive areas". Vehicle access is not to be allowed in the highly sensitive areas. Internal access roads are not to be routed in any surface water resources. Should this be required, a water use license will be required before construction takes place and all mitigation measures are to be implemented accordingly.
- 16. The proposed development (including buildings, wind turbines and all associated infrastructure) should seek to avoid all surface water resources as far as possible. Where this is not possible a single access route or "Right of Way" (RoW) is to be established through or in the desired construction area in the surface water resource(s). The environmentally authorised and license permitted construction area is to be demarcated and made visible. The establishment of the RoW likewise must be demarcated and made visible. The width of the RoW must be limited to the width of the vehicles required to enter the surface water resource. An area around the locations of the proposed development buildings, wind turbines and any other associated infrastructure will be required in order for construction vehicles and machinery to operate/maneuver, only where required. This too must be limited to the smallest possible area and made visible by means of demarcation.
- 17. Where crossings are required, only vehicle tracks should be made through the surface water resources. No crossings however are to be made through the natural depression wetlands. RoW areas through surface water resources should not be completely cleared of vegetation, only the tracks should be cleared. Vegetation should otherwise be trimmed appropriately such that vehicles can move through RoW areas adequately. No structures will need to be placed in the RoW crossing areas through surface water resources since these systems are ephemeral. No bog mats or gravel running tracks would therefore be required. No surface water resources are to be crossed during or directly after a rainfall event.
- 18. Construction workers are only allowed in the designated construction areas of the proposed development and not into the surrounding surface water resources. Highly sensitive areas are to be clearly demarcated prior to the commencement of construction and no access beyond these areas is to be allowed unless in RoW areas.

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- 19. No "long drop" toilets are allowed on the study site. Suitable temporary chemical sanitation facilities are to be provided. Temporary chemical sanitation facilities must be placed at least 100 meters from any surface water resource(s) where required. Temporary chemical sanitation facilities must be checked regularly for maintenance purposes and cleaned often to prevent spills.
- 20. No water is to be extracted unless a water use license is granted for specific quantities for a specific water resource.
- 21. No hazardous or building materials are to be stored or brought into the highly sensitive areas. Should a designated storage area be required, the storage area must be placed at the furthest location from the highly sensitive areas. Appropriate safety measures as stipulated above must be implemented.
- 22. No cement mixing is to take place in a surface water resource. In general, any cement mixing should take place over a bin lined (impermeable) surface or alternatively in the load bin of a vehicle to prevent the mixing of cement with the ground. Importantly, no mixing of cement directly on the surface is allowed in the highly sensitive areas.
- 23. No vehicles are to be allowed in the highly sensitive areas unless authorised. Should vehicles be authorised, all vehicles and machinery are to be checked for oil, fuel or any other fluid leaks before entering the required construction areas. Should there be any oil, fuel or any other fluid leaks, vehicles are not to be allowed into surface water resources.
- 24. All vehicles and machinery must be regularly serviced and maintained before being allowed to enter the construction areas. No fuelling, re-fuelling, vehicle and machinery servicing or maintenance is to take place in the highly sensitive areas.
- 25. Sufficient spill contingency measures must be available throughout the construction process. These include, but are not limited to, oil spill kits to be available, fire extinguishers, fuel, oil or hazardous substances storage areas must be bunded to prevent oil or fuel contamination of the ground and/or nearby surface water resources.
- 26. If wind turbines, buildings and infrastructure are placed within 50m from a surface water resource the following mitigation measures will be required:

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- a) Before any construction or removal of soils and vegetation in any delineated surface water resources is undertaken, the relevant water use license must be obtained and conditions adhered to.
- b) Construction must be limited to the authorised RoW areas where applicable.
- c) Excavated topsoils should be stockpiled separately from subsoils so that it can be replaced in the correct order for rehabilitation purposes post-construction. Soils removed from surface water resources must only be removed if absolutely required. Furthermore, any removed soils and vegetation that are not required should be taken to a registered landfill site that has sufficient capacity to assimilate the spoil. The topsoil is to be used for rehabilitation purposes and should not be removed unless there is surplus that cannot be utilised. It is important that when the soils are re-instated, the subsoils are to be backfilled first followed by the topsoil. The topsoil contains the natural seedbank from which the affected surface water resources or the associated buffer zone can naturally rehabilitate.
- d) Where the soils are excavated from the sensitive areas, it is preferable for them to be stockpiled adjacent to the excavation pit to limit vehicle and any other movement activities around the excavation areas.
- e) Any cement mixing should take place over a bin lined (impermeable) surface or alternatively in the load bin of a vehicle to prevent the mixing of cement with the ground of the surface water resource. Importantly, no mixing of cement directly on the surface is allowed in the construction and RoW areas in surface water resources.
- f) Stockpiled soils will need to be protected from wind and water erosion. Stockpiled soils are not to exceed a 3m height and are to be bunded by suitable materials. Stacked bricks surrounding the stockpiled soils can be adopted. Alternatively, wooden planks pegged around the stockpiled soils can be used.
- g) Ideally, the affected RoW zones in the sensitive areas must be re-instated with the soils removed from the surface water resource(s), and the affected areas must be levelled, or appropriately sloped and scarified to loosen the soil and allow seeds contained in the natural seed bank to re-establish. However, given the aridity of the study area, it is likely that vegetation recovery will be slow. Rehabilitation areas will need to be monitored for

- erosion until vegetation can re-establish where prevalent. If affected areas are dry and no vegetation is present, the soil is to be re-instated and sloped.
- 27. Vegetation clearing should take place in a phased manner, only clearing areas that will be constructed on immediately. Vegetation clearing must not take place in areas where construction will only take place in the distant future.
- 28. An appropriate storm water management plan formulated by a suitably qualified professional must accompany the proposed development to deal with increased run-off in the designated construction areas.
- 29. In general, adequate structures must be put into place (temporary or permanent where necessary in extreme cases) to deal with increased/accelerated run-off and sediment volumes. The use of silt fencing and potentially sandbags or hessian "sausage" nets can be used to prevent erosion in susceptible construction areas. Grass blocks on the perimeter of the wind turbine hard stand areas and building structure footprints can also be used to reduce run-off and onset of erosion. Where required more permanent structures such as attenuation ponds and gabions can be constructed if needs be, however this is unlikely given the study area. All impacted areas are to be adequately sloped to prevent the onset of erosion.

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3.4.8 Waste Management

Table 18: Waste Management

IMPACT	WASTE MANAGEMENT	RESPONSIBILITY
	This section deals with waste management and actions that need to be implemented	
	during construction	
PHASE	CONSTRUCTION	MC, EO, ECO
ENVIRONMENTAL MANA	GEMENT PROGRAMME	
MITIGATION / METHOD	Litter management	
STATEMENT	 Refuse bins must be placed at strategic positions to ensure that litter does not accumulate within the construction site. The Contractor shall supply waste collection bins where such is not available and all solid waste collected shall be disposed of at registered/licensed landfill. A housekeeping team should be appointed to regularly maintain the litter and rubble situation on the construction site. If possible and feasible, all waste generated on site must be separated into glass, plastic, paper, metal and wood and recycled. An independent contractor can be appointed to conduct this recycling. Littering by the employees of the Contractor shall not be allowed under any circumstances. The ECO shall monitor the neatness of the work sites as well as the Contractor campsite. Skip waste containers should be maintained on site. These should be kept covered and arrangements made for them to be collected regularly. 	
	 All waste must be removed from the site and transported to a landfill site promptly to ensure that it does not attract vermin or produce odours. Where a registered waste site is not available close to the construction site, the Contractor shall provide a method statement with regard to waste management. A certificate of disposal shall be obtained by the Contractor and kept on file, if relevant. Under no circumstances may solid waste be burnt on site. 	

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11. All waste must be removed promptly to ensure that it does not attract vermin or produce odours.

Hazardous waste

- 12. All waste hazardous materials, if present, must be carefully stored as advised by the ECO, and then disposed of off-site at a licensed landfill site, where practical.
- 13. Contaminants to be stored safely to avoid spillage.
- 14. Machinery must be properly maintained to keep oil leaks in check
- 15. All necessary precaution measures shall be taken to prevent soil or surface water pollution from hazardous materials used during construction and any spills shall immediately be cleaned up and all affected areas rehabilitated

Sanitation

- 16. The Contractor shall install mobile chemical toilets on the site.
- 17. Staff shall be sensitised to the fact that they should use these facilities at all times. No indiscriminate sanitary activities on site shall be allowed.
- 18. Ablution facilities shall be within proximity from workplaces and not closer than 100m from any natural water bodies or boreholes. There should be enough toilets available to accommodate the workforce (minimum requirement 1: 15 workers). Male and females must be accommodated separately where possible.
- 19. Toilets shall be serviced regularly and the ECO shall inspect toilets regularly.
- 20. Toilets should be no closer than 100m or above the 1:100 year flood line from any natural or manmade water bodies or drainage lines or alternatively located in a place approved of by the Engineer.
- 21. Under no circumstances may open areas, neighbours fences or the surrounding bush be used as a toilet facility.
- 22. The construction of "Long Drop" toilets are forbidden. Rather, portable toilets are to be used.
- 23. Potable water must be provided for all construction staff.

F	Remedial actions		
2	24. Depending on the nature and extent of the spill, contaminated soil must be either excavated		
	or treated on-site.		
2	25. Excavation of contaminated soil must involve careful removal of soil using appropriate		
	tools/machinery to storage containers until treated or disposed of at a licensed hazardous		
	landfill site.		
2	26. The ECO must determine the precise method of treatment for polluted soil. This could involve		
	the application of soil absorbent materials as well as oil-digestive powders to the contaminated soil.		
2	7. If a spill occurs on an impermeable surface such as cement or concrete, the surface spill		
	must be contained using oil absorbent material.		
2	28. If necessary, oil absorbent sheets or pads must be attached to leaky machinery or infrastructure.		
	29. Materials used for the remediation of petrochemical spills must be used according to product specifications and guidance for use.		
3	30. Contaminated remediation materials must be carefully removed from the area of the spill so		
	as to prevent further release of petrochemicals to the environment, and stored in adequate		
	containers until appropriate disposal.		
	SPECIFIC MITIGATION MEASURES		
3	1. Under no circumstances shall rubble, earth or other material be dumped within the servitude		
	restriction area. The project company and/or contractor shall maintain the area concerned to		
	Eskom's satisfaction. The project company and/or contractor shall be liable to Eskom for the		
	cost of any remedial action which has to be carried out by Eskom.		

3.4.9 Flora

Table 19: Flora

IMPACT	FLORA	RESPONSIBILITY
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	This section deals with flora and actions that need to be implemented during construction	
PHASE	CONSTRUCTION	MC, EO, ECO
ENVIRONMENTAL MANA	GEMENT PROGRAMME	
MITIGATION / METHOD	Existing vegetation	
STATEMENT	Vegetation removal must be limited to the construction site.	
	2. Vegetation to be removed as it becomes necessary rather than removal of all vegetation	
	throughout the site in one step.	
	3. Materials should not be delivered to the site prematurely which could result in additional	
	areas being cleared or affected.	
	4. No vegetation to be used for firewood.	
	Rehabilitation	
	5. All damaged areas shall be rehabilitated upon completion of the contract	
	6. Re-vegetation of the disturbed site is aimed at approximating as near as possible the natural	
	vegetative conditions prevailing prior to construction.	
	7. All natural areas impacted during construction must be rehabilitated with locally indigenous	
	species typical of the representative botanical unit.	
	8. Rehabilitation must take place in a phased approach as soon as possible.	
	9. Rehabilitation process must make use of species indigenous to the area. Seeds from surrounding seed banks can be used for re-seeding.	
	10. Rehabilitation must be executed in such a manner that surface run-off will not cause erosion	
	of disturbed areas.	
	11.	
	Demarcation of construction and laydown areas	
	12. All plants not interfering with the construction of the wind energy facility shall be left	
	undisturbed. Species of special concern shall be clearly marked.	
	13. The construction area must be well demarcated and no construction activities must be	
	allowed outside of this demarcated footprint.	

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- 14. Vegetation removal must be phased in order to reduce impact of construction.
- 15. Construction site office and laydown areas must be clearly demarcated and no encroachment must occur beyond demarcated areas.
- 16. Strict and regular auditing of the wind energy facility construction process to ensure containment of the construction and laydown areas.
- 17. Soils must be kept free of petrochemical solutions that may be kept on site during construction. Spillage can result in a loss of soil functionality thus limiting the reestablishment of flora.

Utilisation of resources

18. Gathering of firewood, fruit, multi plants, or any other natural material onsite or in areas adjacent to the site is prohibited unless with prior approval of the ECO.

Exotic vegetation

- 19. Alien vegetation on the site will need to be controlled.
- 20. The contractor should be responsible for implementing a programme of weed control (particularly in areas where soil has been disturbed); and grassing of any remaining stockpiles to prevent weed invasion.
- 21. The spread of exotic species occurring throughout the site should be controlled.

Herbicides

- 22. Herbicide use shall only be allowed according to contract specifications. The application shall be according to set specifications and under supervision of a qualified technician. The possibility of leaching into the surrounding environment shall be properly investigated and only environmentally friendly herbicides shall be used.
- 23. The use of pesticides and herbicides on the site must be discouraged as these can impact on important pollinator species of indigenous vegetation.

SPECIFIC MITIGATION MEASURES

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24. Restrict impact to development footprint only and limit disturbance creeping into surrounding
areas.
25. Compile a detailed Rehabilitation Plan.
26. Compile a detailed Alien Plant Management Plan, including monitoring, to ensure minimal
impacts on surrounding areas.
27. Access to sensitive areas should be limited during construction.
28. Undertake monitoring to evaluate whether further measures would be required to manage
impacts.
29. Permits must be obtained for protected species that will be lost.
30. Protected plants lost to the development should be rescued and planted in appropriate places
in rehabilitation areas. This will reduce the irreplaceable loss of resources as well as the
cumulative effect.
31. A detailed Plant Rescue Plan must be compiled to be approved by the appropriate
authorities.
32. Rehabilitate disturbance as quickly as possible.
33. Prevent invasion by alien plants.

3.4.10 Fauna

Table 20: Fauna

IMPACT	FAUNA	RESPONSIBILITY
	This section deals with fauna and actions that need to be implemented during construction	
PHASE	CONSTRUCTION	MC, EO, ECO
ENVIRONMENTAL MANAGEMENT PROGRAMME		
MITIGATION / METHOD	1. Demarcation of sensitive areas must be verified on site by the ECO prior to construction	
STATEMENT	activities starting.	
	2. Use of appropriate construction techniques.	

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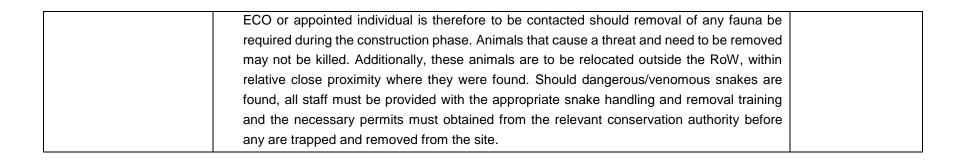
- 3. Rehabilitation to be undertaken as soon as possible after construction has been completed.
- 4. No trapping or snaring to fauna on the construction site is allowed unless dangerous/venomous snakes are found. In this case all staff must be provided with the appropriate snake handling and removal training and the necessary permits must obtained from the relevant conservation authority before any snakes are trapped and removed from the site.
- 5. No faunal species are to be harmed by maintenance staff during any routine maintenance at the development.
- 6. No animals are to be kept as pets.
- 7. All personnel should undergo environmental induction with regards to fauna and in particular awareness about not harming or collecting species such as snakes, tortoises and owls which are often persecuted out of superstition.

SPECIFIC MITIGATION MEASURES

- 8. Continue to observe on site whether sedentary species (i.e. the Littledale's Whistling Rat and the Giant Bullfrog) do or could occur on site or not.
- 9. If these sedentary species are found to occur on site, the habitat requirements of the species on site needs to be determined. Infrastructure must then avoid sensitive areas or else measures must be put in place to minimise impacts.
- 10. Do not carry out blasting works within a delineated bat sensitivity area or buffer zone. Blasting should be minimised and used only when necessary.
- 11. Keep to designated areas when storing building materials, resources, turbine components and/or construction vehicles. Keep to designated roads with all construction vehicles. Damaged areas not in use after construction should be rehabilitated by an experienced vegetation succession specialist.
- 8. No animals on the construction site or surrounding areas are to be hunted, captured, trapped, removed, injured, killed or eaten by construction workers or any other project team members. Should any party be found guilty of such an offence, stringent penalties should be imposed. The appointed ECO or suitably qualified individual may only remove animals, where such animals (including snakes, scorpions, spiders etc.) are a threat to construction workers. The

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3.4.11 Avifauna

Table 21: Avifauna Impact

IMPACT	<i> </i>	Avifauna	RESPONSIBILITY
	1	This section deals with avifaunal issues and actions that need to be implemented during	
	0	construction	
PHASE	(CONSTRUCTION	MC, EO, ECO
ENVIRONMENTAL MANAGEMENT PROGRAMME			
MITIGATION	/ 1	Ensure that key areas of conservation importance and sensitivity are avoided.	
METHOD	2	2. Implement appropriate working practices to protect sensitive habitats.	
STATEMENT	3	3. Provide adequate briefing for site personnel and, in particularly sensitive locations, employing an	
		on-site ecologist during construction.	
	4	Implement an agreed post-development monitoring programme.	
	5	5. Where possible, install low voltage collector cables between the turbines underground (subject to	
		habitat sensitivities and in accordance with existing best practice guidelines for underground cable	
		installation).	
	6	6. Mark overhead cables using deflectors where required and avoiding use over areas of high bird	
		concentrations, especially for species vulnerable to collision.	

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7. Time construction to avoid sensitive periods.	
8. Implement habitat enhancement for species using the site.	
SPECIFIC MITIGATION MEASURES	
Restrict the construction activities to the construction footprint area.	
10. Do not allow any access to the remainder of the property during the construction period.	
11. Measures to control noise and dust should be applied according to current best practice in the industry.	
12. Maximum use should be made of existing access roads and the construction of new roads should be kept to a minimum.	
13. Implement a 3km no development buffer zone around the Verreaux's eagle nest at FP2 - 29°52′56.53″S 22°33′19.06″E.	
14. Implement a 300m no development buffer zone around the Southern Pale Chanting Goshawk nest at FP3 - 29°56'34.42"S 22°32'55.35"E.	

3.4.12 Air Quality

Table 22: Air Pollution

IMPACT	AIR POLLUTION	RESPONSIBILITY
	This section deals with air pollution and actions that need to be implemented during	
	construction	
PHASE	CONSTRUCTION	MC, EO, ECO
ENVIRONMENTAL MANAGEMENT PROGRAMME		
MITIGATION	Dust control	
	1. Wheel washing and damping down of un-surfaced and un-vegetated areas must be undertaken	
	if required.	
	2. Retention of vegetation where possible will reduce dust travel.	

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- 3. Clearing activities must only be done during agreed working times and permitting weather conditions to avoid drifting of sand and dust into neighbouring areas.
- 4. Damping down of all exposed soil surfaces with a water bowser or sprinklers when necessary to reduce dust.
- 5. The Contractor shall be responsible for dust control on site to ensure no nuisance is caused to the neighbouring communities.
- 6. A speed limit of 30km/h must not be exceeded on site.
- 7. Any complaints or claims emanating from the lack of dust control shall be attended to immediately by the Contractor.
- 8. Any dirt roads that are utilised by the workers must be regularly maintained to ensure that dust levels are controlled.

Odour control

- 9. Regular servicing of vehicles in order to limit gaseous emissions.
- 10. Regular servicing of on-site toilets to avoid potential odours.
- 11. Allocated cooking areas must be provided.
- 12. The contractor must make alternative arrangements (other than fires) for cooking and/ or heating requirements. LP gas cookers may be used provided that all safety regulations are followed.

Rehabilitation

13. The contractor should commence rehabilitation of exposed soil surfaces as soon as practical after completion of earthworks.

Fire prevention

- 14. No open fires shall be allowed on site under any circumstance. All cooking shall be done in demarcated areas that are safe and cannot cause runaway fires.
- 15. The Contractor shall have operational fire-fighting equipment available on site at all times. The level of firefighting equipment must be assessed and evaluated through a typical risk assessment process.

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3.4.13 Noise and Vibrations

Table 23: Noise and Vibrations

IMPACT	NOISE	RESPONSIBILITY
	This section deals with noise and actions that need to be implemented during construction	
PHASE	CONSTRUCTION	MC, EO, ECO
ENVIRONMENTAL	MANAGEMENT PROGRAMME	
MITIGATION METHOD	 The construction phase must aim to adhere to the relevant noise regulations and limit noise to within standard working hours in order to reduce disturbance of surrounding farms. 	
STATEMENT	 Construction site yards, workshops, concrete batching plants, and other noisy fixed facilities should be located well away from noise sensitive areas. Once the proposed final layouts are made available by the contractor(s), the sites must be evaluated in detail and specific measures designed in to the system. Truck traffic should be routed away from noise sensitive areas, where possible. Noise levels must be kept within acceptable limits. Noisy operations should be combined so that they occur where possible at the same time. Construction activities are to be contained to reasonable hours during the day and early evening. Night-time activities near noise sensitive areas should not be allowed. Construction workers to wear necessary ear protection gear. Noisy activities to take place during allocated construction hours. Noise from labourers must be controlled. Noise suppression measures must be applied to all construction equipment. Construction equipment must be kept in good working order and where appropriate fitted with silencers which are kept in good working order. Should the vehicles or equipment not be in good working order, the contractor may be instructed to remove the offending vehicle or machinery from site. The contractor must take measures to discourage labourers from loitering in the area and causing noise disturbance. Where possible labour shall be transported to and from the site by the 	
	contractor or his Sub-Contractors by the contractors own transport. 12. Implementation of enclosure and cladding of processing plants.	
	1.2. Implementation of disclosure and diagrams of processing plants.	

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- 13. Applying regular and thorough maintenance schedules to equipment and processes. An increase in noise emission levels very often is a sign of the imminent mechanical failure of a machine.
- 14. Route construction traffic as far as practically possible from potentially sensitive receptors.
- 15. Ensure a good working relationship between the developer and all potentially sensitive receptors. Communication channels should be established to ensure prior notice to the sensitive receptor if work is to take place close to them. Information that should be provided to the potential sensitive receptor(s) include:
 - Proposed working times;
 - how long the activity is anticipated to take place;
 - what is being done, or why the activity is taking place;
 - contact details of a responsible person where any complaints can be lodged should there be an issue of concern.
- 16. When working near (within 500 meters potential construction of access roads and trenches) to a potential sensitive receptor(s), limit the number of simultaneous activities to the minimum as far as possible;
- 17. When working in very close proximity to potentially sensitive receptors, coordinate the working time with periods when the receptors are not at home where possible. An example would be to work within the 08:00 to 17:00 time-slot to minimize the significance of the impact because:
 - Potential receptors are most likely at school or at work, minimizing the probability of an impact happening;
 - Normal daily activities will generate other noises that would most likely mask construction noises, minimizing the probability of an impact happening.
- 18. Reduce the noise impact during the construction phase by:
 - Using the smallest/quietest equipment for the particular purpose. For modelling purposes the
 noise emission characteristics of large earth-moving equipment (typically of mining
 operations) were used, that would most likely over-estimate the noise levels. The use of
 smaller equipment therefore would have a significantly lower noise impact;
 - Ensuring that equipment is well-maintained and fitted with the correct and appropriate noise abatement measures.

SPECIFIC MITIGATION MEASURES

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19. Where possible vehicles with noise reduction packages should be used.	
20. Restrict the construction activities to daytime.	

3.4.14 Energy use

Table 24: Energy use

IMPACT	ENERGY USE	RESPONSIBILITY
	This section deals with energy use and actions that need to be implemented during	
	construction	
PHASE	CONSTRUCTION	MC, EO, ECO
ENVIRONMENTAL	MANAGEMENT PROGRAMME	
MITIGATION /	Energy saving lighting must be implemented across the board.	
METHOD	2. Water saving measures must be implemented across the facility to ensure little wastage.	
STATEMENT	3. Minimal lighting, while maintaining health and safety regulations, must be kept on during the night operations.	
	4. Equipment not in use must be switched off and unplugged to save on unnecessary energy costs.	

3.4.15 Employment

Table 25: Employment

IMPACT	EMPLOYMENT	RESPONSIBILITY
	This section deals with employment and actions that need to be implemented during	
	construction	
PHASE	CONSTRUCTION	PM, MC, EO, CLO
ENVIRONMENTAL N	MANAGEMENT PROGRAMME	
MITIGATION /	Labour	
METHOD	1. The use of labour intensive construction measures should be used where appropriate.	
STATEMENT	2. Training of labour to benefit individuals.	
	Recruitment Plan	
	3. The majority of unskilled labourers should be drawn from the local market and where possible	
	use should be made of local semiskilled and skilled personnel.	
	4. Local suppliers to be used where possible.	
	5. The Project Manager must ensure that all staff working on the proposed project are in possession	
	of a South African Identity Document or a relevant work permit.	
	6. Ensure adequate advertising in the project community areas, local papers for labour. Adverts are	
	to be placed in each area where the public meetings were conducted.	
	7. Local community key stakeholders must be utilised to source labour where possible.	
	8. The recruitment process must be equitable and transparent. A concerted effort will be made to	
	guard against nepotism and/or any form of favouritism during the process.	
	9. The recruitment of skilled labour will follow standard advertising process in national newspapers	
	and interview based selection.	
	10. A record of official complaints by employees is to be maintained and a grievance mechanism	
	should be put in place for all employees.	
	SPECIFIC MITIGATION MEASURES	

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- 11. Where possible and feasible, local procurement of labour should be applied to ensure the maximum benefit to the impacted community.
- 12. Establish if a skills database exists within the local area; if so, it should be made available to contractors information sharing will ensure that the proposed development is understood, enabling those individuals with fitting skills, if any, to make their services and/or knowledge available to the project proponent.
- 13. If no database exists, set-up a skills desk at the local municipal office and in the nearby communities to identify skills available in the community which will assist in recruiting local labour.
- 14. When hiring, the EPC contractor should enquire about current or previous employment and avoid employing farm workers, where feasible.
- 15. When hiring, the EPC contractor should inform all potential job seekers and candidates that construction work will be temporary and also warned of the potential negative consequences, e.g. loss of permanent employment.
- 16. Where possible and feasible, local procurement of labour should be applied to ensure the maximum benefit to the impacted community.
- 17. Knowledge sharing and on-the-job training should be promoted by the developer among the appointed contractors and, where feasible, viewed as a prerequisite for securing contracts related to the project.

*Please note: The recruitment plan may slightly change from time to time as the main construction contractors have not been selected.

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Table 26: Occupational Health and Safety

IMPACT	HEALTH AND SAFETY	RESPONSIBILITY
	This section deals with health and safety and actions that need to be implemented during	
	construction	
PHASE	CONSTRUCTION	MC/EO/ECO/CLO
ENVIRONMENTAL	. MANAGEMENT PROGRAMME	
MITIGATION	Worker safety	
METHOD	1. Implementation of safety measures, work procedures and first aid must be implemented on site.	
STATEMENT	2. Workers should be thoroughly trained in using potentially dangerous equipment.	
	3. Contractors must ensure that all equipment is maintained in a safe operating condition.	
	4. A safety officer must be appointed.	
	5. A record of health and safety incidents must be kept on site.	
	6. Any health and safety incidents must be reported to the Project Manager immediately.	
	7. First aid facilities must be available on site at all times and a number of employees trained to	
	carry out first aid procedures.	
	8. Workers have the right to refuse work in unsafe conditions.	
	9. The Contractor shall take all the necessary precautions against the spreading of disease such	
	as measles, foot and mouth, etc. especially under livestock.	
	10. A record shall be kept of drugs administered or precautions taken and the time and dates when	
	this was done. This can then be used as evidence in court should any claims be instituted	
	against the Project Company or the Contractor.	
	11. The contractor must ensure that all construction workers are well educated about HIV/ AIDS	
	and the risks surrounding this disease. The location of the local clinic where more information	
	and counselling is offered must be indicated to workers.	
	12. Material stockpiles or stacks must be stable and well secured to avoid collapse and possible	
	injury to site workers / local residents.	

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Worker facilities

- 13. Eating areas should be regularly serviced and cleaned to ensure the highest possible standards of hygiene and cleanliness.
- 14. Fires are not to be allowed outside controlled areas.

Hazardous substances

15. Working areas should be provided with adequate ventilation and dust/fume extraction systems to ensure that inhalation exposure levels for potentially corrosive, oxidizing, reactive or siliceous substances are maintained and managed at safe levels.

Machinery and Equipment

- 16. Use of contrast colouring on equipment/ machinery including the provision of reflective markings to enhance visibility.
- 17. Use of moving equipment/machinery equipped with improved operator sight lines.
- 18. Issuing workers with high visibility clothing.
- 19. Use of reflective markings on structures, traffic junctions, and other areas with a potential for accidents.
- 20. Installing safety barriers in high risk locations.

Fitness for work

21. Review shift management systems to minimize risk of fatigue. Establish alcohol and other drugs policy for the operation.

Travel and remote site health

- 22. Develop programs to prevent both chronic and acute illnesses through appropriate sanitation and vector control systems.
- 23. Where food is prepared on site, food preparation storage and disposal should be reviewed regularly and monitored to minimise risk of illness.

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Protective gear

- 24. Personal Protective Equipment (PPE) must be made available to all construction staff and must be compulsory. Hard hats and safety shoes must be worn at all times and other PPE worn were necessary i.e. dust masks, ear plugs etc.
- 25. No person is to enter the site without the necessary PPE.

Site safety

- 26. The construction camp must remain fenced for the entire construction period.
- 27. Potentially hazardous areas are to be demarcated and clearly marked.
- 28. Adequate warning signs of hazardous working areas.
- Emergency numbers for local police and fire department etc. must be placed in a prominent area.
- 30. Firefighting equipment must be placed in prominent positions across the site where it is easily accessible. This includes fire extinguishers, a fire blanket as well as a water tank.
- 31. Suitable conspicuous warning signs in English and all other applicable languages must be placed at all entrances to the site.
- 32. All speed limits must be adhered to.

Construction equipment safety

33. All equipment used for construction, including drills, TLB's must be in good working order with up to date maintenance records.

Hazardous Material Storage

- 34. All storage tanks containing hazardous materials (fuel) must be placed in bunded containment areas with sealed surfaces. The bund walls must be high enough to contain 110% of the total volume of the stored hazardous material. These areas should be roofed to avoid contamination of storm water.
- 35. Material Safety Data Sheets (MSDS) which contain the necessary information pertaining to a specific hazardous substance must be present for all hazardous materials stored on the site.

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Procedure in the event of a petrochemical spill

- 36. A spill kit needs to be kept on site to address any unforeseen spillages.
- 37. The individual responsible for or who discovers the petrochemical spill must report the incident to the Project Manager, Contractor or ECO.
- 38. The problem must be assessed and the necessary actions required will be undertaken.
- 39. The immediate response must be to contain the spill.
- 40. The source of the spill must be identified, controlled, treated or removed wherever possible.

Fire management

- 41. Firefighting equipment should be present on site at all times.
- 42. All construction staff must be trained in fire hazard control and firefighting techniques.
- 43. All flammable substances must be stored in dry areas which do not pose an ignition risk to the said substances.
- 44. No open fires will be allowed on site.
- 45. Smoking may only be conducted in demarcated areas.

Safety of surrounding residents

- 46. All I & AP's should be notified in advance of any known potential risks associated with the construction site and the activities on it. Examples of these are:
 - Blasting
 - o Earthworks / earthmoving machinery on steep slopes above houses / infrastructure
 - o Risk to residence along haulage roads / access routes

Emergency evacuation plan

- 47. Upon completion of the construction phase, an emergency preparedness plan must be drawn up to ensure the safety of the staff and surrounding land users in the case of an emergency.
- 48. All staff must undergo safety training.

Maintenance

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49. The wind energy facility and surrounding areas are to be regularly maintained. A maintenance schedule must be drawn up and records of all maintenance kept.

SPECIFIC MITIGATION MEASURES

- 50. SENTECH prior written consent must first be obtained before any construction activities underneath, along, across or within close proximity to SENTECH infrastructure can begin and shall comply with the applicable SENTECH guidelines relating to clearances between equipment and the proposed construction activity. Furthermore, the project company must clearly adhere to, and ensure all installations shall be fully compliant with the Occupational Health and Safety Act No. 85 of 1993.
- 51. The project company must, in carrying out any work or project, take all the necessary precautions for the safety of SENTECH's employees, contractors, representatives and its property, including the radio transmitters and links on or near the site against damages as a result of construction of the project.
- 52. The Project company will be liable for all and any direct and/or indirect, and/or consequential damages or injury that may be caused by the project company, its contractors, subcontractors, employees, agents or representatives to any employee, contractor, representative or property of SENTECH including radio network transmitters and/or links or land which may have been disturbed must be restored to the same condition in which it was before commencement of the construction of the energy project.
- 53. Eskom's rights and services must be acknowledged and respected at all times.
- 54. The clearances between Eskom's live electrical equipment and the proposed construction work must be observed as stipulated by Regulation 15 of the Electrical Machinery Regulations of the Occupational Health and Safety Act, 1993 (Act 85 of 1993).
- 55. Houses, or structures occupied or frequented by human beings must not be erected under the power lines or within the servitude restriction area.

3.4.17 Security

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Table 27: Security

IMPACT		SECURITY	RESPONSIBILITY
		This section deals with security and actions that need to be implemented during construction	
PHASE		CONSTRUCTION	MC / EO / ECO
ENVIRONMENT	AL N	MANAGEMENT PROGRAMME	
MITIGATION	1	1. A security company should be employed to guard the construction site and monitor access. This	
METHOD		company should also be utilised for the operation phase.	
STATEMENT		2. Labour should be transported to and from the site to discourage loitering in adjacent areas and possible increase in crime or disturbance.	
		3. Unsocial activities such as consumption or illegal selling of alcohol, drug utilisation or selling and prostitution on site shall be prohibited. Any persons found to be engaged in such activities should receive disciplinary or criminal action taken against them.	
		4. Only pre-approved staff must be permitted to stay within the staff accommodation in the event that staff accommodation will be provided.	
		5. The site shall be fenced, where necessary to prevent any loss or injury to persons during the construction phase.	
		6. No alcohol/ drugs are to be present or taken on site.	
		7. No firearms allowed on site or in vehicles transporting staff to / from site (unless used by security personnel).	
		8	
		9. Construction staff are to make use of the facilities provided for them, as opposed to ad-hoc alternatives (e.g. fires for cooking, the use of surrounding bush as a toilet facility are forbidden).	
		10. Trespassing on private / commercial properties adjoining the site is forbidden.	
		11. Driving under the influence of alcohol is prohibited.	
		12. All employees must undergo the necessary safety training and wear the necessary protective clothing.	
		13. The site must be secured in order to reduce the opportunity for criminal activity in the locality of the construction site.	

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Table 28: Social Environment

IMPACT	SOCIAL ENVIRONMENT	RESPONSIBILITY
	This section deals with social environment and actions that need to be implemented	
	during construction	
PHASE	CONSTRUCTION	MC/EO/ECO/CLO
ENVIRONMENTAL N	MANAGEMENT PROGRAMME	
MITIGATION	1. All contact with the affected parties shall be courteous at all times. The rights of the affected	
	parties shall be respected at all times.	
	2. A complaints register should be kept on site. Details of complaints should be incorporated	
	into the audits as part of the monitoring process. This should be in carbon copy format, with	
	numbered pages. Any missing pages must be accounted for by the Contractor.	
	3. Damage to infrastructure shall not be tolerated and any damage shall be rectified	
	immediately by the Contractor. A record of all damage and remedial actions shall be kept on	
	site.	
	4. Care must be taken not to damage irrigation equipment, lines, channels and crops.	
	SPECIFIC MITIGATION MEASURES	
	5. The footprint associated with construction related activities must be minimised.	
	6. Construction vehicles should only access the construction site via demarcated access roads	
	and should not be allowed to cut across farms or vacant (agricultural) land.	
	7. The project developers and affected land owners should discuss and agree on appropriate	
	construction procedures, which will minimise disruption of current faming activities.	
	8. Awareness should be raised among construction workers on health issues, including	
	HIV/AIDS.	
	9. Condoms should be made available to employees and all contractor workers for free.	
	10. A Code of Conduct should be developed for all employees related to the project, which	
	includes no tolerance of activities such as alcohol and drug abuse.	

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- 11. The project proponent should attempt to resolve issues and concerns, which they are made aware of immediately. If this is not possible, this should be communicated to the landowner along with a plan on how and when the problem will be addressed.
- 12. Movement of construction workers on and off site must be closely monitored and managed.
- 13. During construction the rules and regulations must be clearly communicated to all workers, personal property must be respected and avoided.
- 14. Manage workers must ensure that they are only on site during the reasonable working hours.
- 15. Where possible and feasible, local procurement of labour, goods, and services must be practiced to maximise the benefit to the local economy and community.
- 16. Damage caused to local farm roads by construction related activities must be repaired by the project proponent.
- 17. Dust suppression measures must be implemented.
- 18. Appropriate signage must be put up for traffic control and road safety.
- 19. Establish a health facility for the duration of the construction period to provide services to the construction crew and alleviate pressure on the local facilities.

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Table 29: Heritage

IMPACT	CULTURAL AND HERITAGE ARTEFACTS	RESPONSIBILITY
	This section deals with the impact that the new development has on potential archaeological	
	artefacts of the site	
PHASE	CONSTRUCTION	MC / EO / ECO
ENVIRONMENTAL	MANAGEMENT PROGRAMME	
MITIGATION	1 1. Any finds must be reported to the nearest National Monuments office to comply with the National	
METHOD	Heritage Resources Act (Act No 25 of 1999) and to DEA.	
STATEMENT	2. Local museums as well as the South African Heritage Resource Agency (SAHRA) should be	
	informed if any artefacts are uncovered in the affected area.	
	3. The contractor must ensure that his workforce is aware of the necessity of reporting any possible	
	historical or archaeological finds to the ECO so that appropriate action can be taken.	
	4. Any discovered artefacts shall not be removed under any circumstances. Any destruction of a	
	site can only be allowed once a permit is obtained and the site has been mapped and noted.	
	Permits shall be obtained from the South African Heritage Resources Association (SAHRA)	
	should the proposed site affect any world heritage sites or if any heritage sites are to be	
	destroyed or altered.	
	5. Should any archaeological sites / graves be uncovered during construction, their existence shall	
	be reported to the Project Company and MC immediately.	
	SPECIFIC MITIGATION MEASURES	
	6. The EAP as well as the ECO for this project must be made aware of the fact that sediments of	
	the Uitdraai Formation, Bulpan Group, can contain significant micro-fossil remains, albeit mostly	
	algal structures. The shale of the Dwyka Group can contain significant fossils and it is advisable	
	that a Palaeontologist be appointed at the start of the construction in areas underlain by this	
	group, to visit the site initially to ensure that no significant fossils are damaged. The Gordonia	
	Formation is mainly windblown sand but if the EAP, ECO and/or HIA specialist observe any	

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- suspiciously looking structures during excavation into these rock types, the Palaeontologist must be informed and at least one site visit is recommended to ensure that no fossils are damaged.
- 7. The two historic spring sites indicated on the Palaeontological sensitivity map must for at least 500m around them be declared "No-Go" zones.
- 8. Stone Age find spots and sites should be avoided as far as possible.
- 9. Demarcate historical structures and cemeteries as no-go areas.
- 10. Demarcate and erect a fence around historical structures and cemeteries if construction activities area to happened within 100 meters from these historical structures and cemeteries.
- 11. Monitor find spot areas if construction is going to take place through them.
- 12. A management plan for the heritage resources needs then to be compiled and approved for implementation during construction. If possible, surface collections should be undertaken for sites with a medium to high significance as well as conducting a watching brief by heritage practitioner during the construction phase.
- 13. In the event that cemeteries cannot be excluded from the development footprint a grave relocation process needs to be implemented.
- 14. Monitoring Reports of construction activities near ALE 4 and ALE 36 must be submitted to SAHRA upon completion of the construction activities.
- 15. A no-go buffer zone of 30m must be adhered to around the identified burial grounds. The management of the burial grounds must be included in the Heritage Management Plan (HMP).
- 16. If it not be possible to retain the burial grounds in situ, a consultation process in terms of section 36 of the NHRA and Chapter XI of the NHRA Regulations must be undertaken. If, following the consultation process, grave relocation is found to feasible, a permit in terms of section 36 of the NHRA and Chapter IX of the NHRA Regulations must be applied for. Relocation of graves may only occur if SAHRA issues a permit for this purpose.
- 17. If any evidence of archaeological sites or remains (e.g. remnants of stone-made structures, indigenous ceramics, bones, stone artefacts, ostrich eggshell fragments, charcoal and ash concentrations), fossils or other categories of heritage resources are found, the SAHRA Archaeology, Palaeontology and Meteorites (APM) Unit (Natasha Higgitt/Phillip Hine: 021 462 5402) must be alerted. A professional archaeologist or palaeontologist, depending on the nature of the finds, must be contracted as soon as possible to inspect the findings. If the newly

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discovered heritage resources prove to be of archaeological or palaeontological significance, a
Phase 2 rescue operation may be required subject to permits issued by SAHRA.
18. If unmarked human burials are uncovered, the SAHRA Burial Grounds and Graves (BGG) Unit
(Mimi Seetelo: 012 320 8490), must be alerted immediately. A professional archaeologist or
palaeontologist, depending on the nature of the finds, must be contracted as soon as possible
to inspect the findings. If the newly discovered heritage resources prove to be of archaeological
or palaeontological significance, a Phase 2 rescue operation may be required subject to permits
issued by SAHRA.

3.4.20 Community Engagement

Table 30: Community Engagement

IMPACT	COMMUNITY ENGAGEMENT	RESPONSIBILITY
	This section deals with surrounding community and actions that need to be implemented	
	during construction	
PHASE	CONSTRUCTION	EO / ECO / CLO
ENVIRONMENTA	AL MANAGEMENT PROGRAMME	l
MITIGATION	A communication guideline to be drafted and agreed upon with authority representatives and affected communities.	
	2. Open and transparent community engagement to be followed as culturally appropriate.	
	3. Records (written) are to be kept of all community engagements (e.g. complaints, resolutions,	
	etc.).	

3.4.21 Visual Impact

Table 31: Visual Impact

IMPACT	VISUAL	RESPONSIBILITY

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	This section deals with visual issues and actions that need to be implemented during	
PHASE	CONSTRUCTION CONSTRUCTION	MC / EO / ECO
ENVIRONMENTA	L MANAGEMENT PROGRAMME	
MITIGATION	1 1. Construction activities must not occur at night and lighting should only be erected where	
METHOD	absolutely necessary.	
STATEMENT	2. Construction traffic must stick to designated routes or access roads.	
	3. Construction areas are to be kept clean and tidy.	
	4. Measures must be taken to suppress dust arising from construction activities.	
	5. Labour being transported to the site must take cognisance of litter and waste concerns.	
	6. Equipment being transported to the site must be covered with tarps.	
	7. Topsoil stockpiles must be well managed and seeded when possible if not utilised within three	
	months.	
	8. It is recommended that equipment be stored discreetly so as not to increase visual impacts.	
	9. Construction must be conducted in the shortest possible time in order to reduce visual impacts.	
	SPECIFIC MITIGATION MEASURES	
	10. Minimise vegetation clearing and rehabilitate cleared areas as soon as possible.	
	11. Vegetation clearing should take place in a phased manner.	
	12. Maintain a neat construction site by removing rubble and waste materials regularly.	
	13. Make use of existing gravel access roads, where possible.	
	14. Ensure that dust suppression techniques are implemented on all gravel access roads utilised	
	during construction.	
	15. Ensure that dust suppression is implemented in all areas where vegetation clearing has taken	
	place.	
	16. Ensure that dust suppression techniques are implemented on all soil stockpiles.	
	17. Where possible, re-vegetate all reinstated cable trenches with the same vegetation that existed	
	prior to the cable being laid.	
	18. Temporarily fence-off the construction site (for the duration of the construction period).	

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3.4.22 Interference

Table 32: Interference

IMPACT	INTERFERENCE	RESPONSIBILITY
	This section deals with issues related to interference and actions that need to be	
	implemented during construction	
PHASE	CONSTRUCTION	MC / EO / ECO
ENVIRONMENTAL N	MANAGEMENT PROGRAMME	
MITIGATION /	1. Should any radio transmissions be affected by construction activities, the cause of the	
METHOD	interference must be removed within the written notice period indicated by SENTECH.	
STATEMENT	2. If the services of SENTECH or its clients is in any way compromised by a deviation or change	
	of approval, the project company shall be liable for all costs to re-establish, or relocate the	
	services, and under no circumstances whatsoever will SENTECH be liable to the project	
	company or any other third party for any damages, loss or costs, of any nature whatsoever or	
	howsoever arising, suffered as a consequence.	
	3. If any additions, amendments, additional structures are to be built, or any change to the energy	
	farm boundaries, a new application for approval to SENTECH must be made.	

3.5 Operation Phase

3.5.1 Construction Site Decommissioning

Table 33: Construction Site Decommissioning

IMPACT	CONSTRUCTION SITE DECOMMISSIONING	RESPONSIBILITY
PHASE	OPERATION	MC / PROJECT
		COMPANY / ECO /
		EO
ENVIRONMENTA	AL MANAGEMENT PROGRAMME	
MITIGATION	Removal of equipment	
	1. All structures comprising the construction camp are to be removed from site.	
	2. The area that previously housed the construction camp is to be checked for spills of substances	
	such as oil, paint, etc., and these shall be cleaned up.	
	3. All hardened surfaces within the construction camp area should be ripped, all imported materials	
	removed, and the area shall be top soiled and regressed using the guidelines set out in the re-	
	vegetation that forms part of this document.	
	Temporary services	
	4. The Contractor must arrange the cancellation of all temporary services.	
	5. Temporary roads must be closed and access across these, blocked.	
	6. All areas where temporary services were installed are to be rehabilitated to the satisfaction of	
	the ECO.	
	Associated infrastructure	
	7. Surfaces are to be checked for waste products from activities such as concreting or asphalting	
	and cleared in a manner approved by the Engineer.	
	8. All surfaces hardened due to construction activities are to be ripped and imported material	
	thereon removed.	

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9. All rubble is to be removed from the site to an approved disposal site as approved by the
Engineer. Burying of rubble on site is prohibited.
10. The site is to be cleared of all litter.
11. The Contractor is to check that all watercourses are free from building rubble, spoil materials and waste materials.
12. Fences, barriers and demarcations associated with the construction phase are to be removed from the site unless stipulated otherwise by the Engineer.
13. All residual stockpiles must be removed to spoil or spread on site as directed by the Engineer.
14. All leftover building materials must be returned to the depot or removed from the site.
15. The Contractor must repair any damage that the construction works has caused to neighbouring
properties, specifically, but not limited to, damage caused by poor storm water management.
Rehabilitation plan
16. Rehabilitate and re-vegetate cleared areas with indigenous plant species that were present on site prior to construction.

3.5.2 Operation and Maintenance

Table 34: Operation and Maintenance

IMPACT	OPERATION AND MAINTENANCE	RESPONSIBILITY
PHASE	OPERATION	PROJECT
		COMPANY
ENVIRONMENTA	AL MANAGEMENT PROGRAMME	,
MITIGATION	Maintenance	
	1. All applicable standards, legislation, policies and procedures must be adhered to during operation.	
	2. Regular ground inspection of the energy facilities must take place to monitor their status.	
	Public awareness	

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3	3. The emergency preparedness plan must be ready for implementation at all times should an	
	emergency situation arise.	
	SPECIFIC MITIGATION MEASURES	
5 6 7	 Consultation with the directly affected and adjacent land owners must be on-going to limit the effect on productive agricultural land. Where possible and feasible, local procurement of labour should be applied to ensure the maximum benefit to the impacted community. When feasible local procurement of goods and services should be implemented to further increase the benefit to the local community. It is recommended that in order to curb the increase in property prices in the area, proper planning concerning accommodation of the construction crew is done. Aim to hire as many people from the local community as possible to limit the increase in demand for accommodation. Monitoring Reports of construction activities near ALE 4 and ALE 36 must be submitted to 	
	SAHRA upon completion of the construction activities.	

3.5.3 Surface and Groundwater

Table 35: Surface and Groundwater

IMPACT	SURFACE AND GROUNDWATER	RESPONSIBILITY
PHASE	OPERATION	PROJECT
		COMPANY
ENVIRONMENTAL	ONMENTAL MANAGEMENT PROGRAMME	
MITIGATION Surface water		
	1. Correct drainage of the site should ensure that contaminants do not impact upon surface water.	
	2. The storm water system on the proposed site needs to be regularly maintained to ensure effective working.	

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Monitoring and Reporting

- 3. Specific activities that should be monitored include:
 - Erosion potential (specifically in and around roads and storm water discharge points).
 - Storm water management and design.
 - Identified problem areas.

SPECIFIC MITIGATION MEASURES

- 4. Potential impacts can be avoided by the planning and routing of access / service roads outside of and away from surface water resources.
- 5. Where access through surface water resources are unavoidable and are absolutely required, it is recommended that any road plan and associated structures (such as storm water flow pipes, culverts, culvert bridges etc.) be submitted to the relevant environmental and water departments for approval prior to construction.
- 6. Internal access and services roads authorised in sensitive areas must be regularly monitored and checked for erosion. Monitoring should be conducted once every month. Moreover, after short or long periods of heavy rainfall or after long periods of sustained rainfall the roads will need to be checked for erosion. Rehabilitation measures will need to be employed should erosion be identified.
- 7. Where erosion begins to take place, this must be dealt with immediately to prevent significant erosion damage to the surface water resources. Should large scale erosion occur, a rehabilitation plan will be required. Input, reporting and recommendations from a suitably qualified wetland/surface water specialist must be obtained in this respect should this be required.
- 8. Any hardstand area or building within 50m proximity to a surface water resource must have energy dissipating structures in an appropriate location to prevent increased run-off entering adjacent areas or surface water resources. This can be in the form of hard concrete structures or soft engineering structures (such as grass blocks for example).

BIOTHERM ENERGY

9. Alternatively, a suitable operational storm water management design or plan can be compiled
and implemented that accounts for the use of appropriate alternative structures or devices that
will prevent increased run-off and sediment entering adjacent areas or surface water resources.

3.5.4 Biodiversity

Table 36: Biodiversity

IMPACT	BIODIVERSITY (FAUNA AND FLORA)	RESPONSIBILITY
PHASE	OPERATION	PROJECT
		COMPANY
ENVIRONMENT	AL MANAGEMENT PROGRAMME	
MITIGATION	Vegetation	
	1. Indigenous vegetation must be maintained and all exotics removed as they appear and disposed of appropriately.	
	2. Re-vegetation of the disturbed site is aimed at approximating as near as possible the natural vegetative conditions prevailing prior to construction.	
	3. Vegetative re-establishment shall, as far as possible, make use of indigenous or locally occurring plant varieties within a 20-metre radius of the site.	
	4. Rehabilitation must be executed in such a manner that surface run-off will not cause erosion of disturbed areas during and following rehabilitation.	
	Other fauna	
	No faunal species must be harmed by maintenance staff during any routine maintenance at the development.	

SPECIFIC MITIGATION MEASURES		
6.	Undertake a comprehensive alien plant species survey to determine which species occur on	
	site and where they are located.	
7.	Compile and implement an alien management plan, which highlights control priorities and areas	
	and provides a programme for long-term control.	
8.	Undertake regular monitoring to detect alien invasions early so that they can be controlled.	
9.	Implement control measures.	
10.	Avoid areas of bat sensitivity and their associated buffers.	
11.	Utilise lights with wavelengths that attract less insects (low thermal/infrared signature). If not	
	required for safety or security purposes, lights should be switched off when not in use or	
	equipped with passive motion sensors.	

3.5.5 Waste Management

Table 37: Waste Management

IMPACT	WASTE MANAGEMENT	RESPONSIBILITY
PHASE	OPERATION	PROJECT
		COMPANY
ENVIRONMENT	AL MANAGEMENT PROGRAMME	
MITIGATION	Recycling and litter management	
	1. The site should be kept clear of litter at all times.	
	2. Solid waste separation and recycling should take place for the duration of the operational phase	
	for the development at the administration block.	
	3. All waste must be removed promptly to ensure that it does not attract vermin or produce odours.	
	4. In house treatment procedures must be followed strictly.	
	5. Solid waste should be collected on a regular basis.	
	6. Package treatment plant must be regularly serviced.	

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Table 38: Health and Safety

IMPACT	HEALTH AND SAFETY	RESPONSIBILITY
PHASE	OPERATION	PROJECT
		COMPANY
ENVIRONMENTA	AL MANAGEMENT PROGRAMME	
MITIGATION	Emergency evacuation plan	
	1. Upon completion of the construction phase, an emergency evacuation plan must be drawn up	
	to ensure the safety of the staff and surrounding land users in the case of an emergency.	
	Maintenance	
	2. The wind energy facility is to be regularly maintained. A maintenance schedule must be drawn	
	up and records of all maintenance kept.	
	Fire safety	
	3. Fire-fighting equipment in the form of fire hydrants or fire extinguishers must be available on the	
	site. These must be regularly maintained by an appropriate company.	
	Storage and handling of hazardous waste	
	4. Transformer oil containers must be regularly maintained to ensure that leaks do not occur.	
	5. A spill kit needs to be kept on site to address any unforeseen spillages.	
	6. Transport of all hazardous substances must be in accordance with the relevant legislation.	
	7. The bund wall surrounding the transformer oil containers must be regularly maintained to ensure	
	that any spills are completely contained.	

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3.5.7 Visual Impact

Table 39: Visual Impact

IMPACT	VISUAL IMPACT	RESPONSIBILITY
PHASE	OPERATION	PROJECT
		COMPANY
ENVIRONMENTAL	MANAGEMENT PROGRAMME	
MITIGATION	 Maintenance and lighting Lighting must be kept to a minimum and restricted to low level, downward facing lights to reduce light spill; Lighting must be inward and downward pointing to reduce glare in surrounding areas. The wind energy facility area and surrounds must be kept clean, tidy and well maintained to reduce negative visual impacts; Rehabilitation of surrounding areas must take place with indigenous species; Surrounding roads must be well maintained; Regular maintenance of exteriors and associated infrastructure must be undertaken. 	
	SPECIFIC MITIGATION MEASURES	
	 Light fittings for security at night should reflect the light toward the ground (except for aviation lighting) and prevent light spill. Turbines should be painted plain white, as this is a less industrial colour. Bright colours or obvious logos should not be permitted. Turbines should be repaired promptly. If required, turbines should be replaced with the same model, or one of equal height and scale. As far as possible, limit the number of maintenance vehicles, which are allowed to access the site. Ensure that dust suppression techniques are implemented on all access roads, utilised during operation. The operations and maintenance buildings should not be illuminated at night, if possible. 	

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IMPACT	VISUAL IMPACT	RESPONSIBILITY
	14. The operation and maintenance building should be painted with natural tones that fit with the	
	surrounding environment. Non-reflective surfaces should be utilised where possible.	

3.5.8 Avifauna

Table 40: Avifauna

IMPACT	AVIFAUNA	RESPONSIBILITY
PHASE	OPERATION	PROJECT
		COMPANY
ENVIRONMENT	AL MANAGEMENT PROGRAMME	
MITIGATION	Once the wind energy facility has been constructed monitoring should be implemented to assess	
	mortalities, to to make comparisons with baseline conditions and compare actual collision rates with predicted collision rate.	
	2. Maintenance staff should not be allowed to access other parts of the property unless it is necessary project related work.	
	3. If actual displacement levels of priority species prove to be high, appropriate off-sets should be	
	considered.	
	SPECIFIC MITIGATION MEASURES	
	4. If densities of key priority species are proven to be significantly reduced due to the operation of	
	the wind farm, the management of the wind farm must be engaged to devise ways of reducing the impact on these species.	
	5. If actual collision rates indicate significant mortality levels at specific turbines, curtailment of these	
	turbines should be implemented.	
	6. A 200m no turbine zone is recommended around all water points.	
	7. A 3km no development buffer zone is recommended around the Verreaux's Eagle nest at FP2 - 29°52′56.53″S 22°33′19.06″E.	

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8. A 300m no development buffer zone is recommended around the Southern Pale Chanting	
Goshawk nest at FP3 - 29°56'34.42"S 22°32'55.35"E.	

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3.6 Decommissioning phase

The mitigation measures presented below are of relevance to the decommissioning of the wind energy facility. Furthermore, mitigation measures implemented during construction with regards to the construction camp and equipment, and social impacts, will remain the same for the decommissioning phase when a construction camp will need to be established again.

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3.6.1 Ongoing Stakeholder involvement

This is the process that is recommended when the proposed wind energy facility is decommissioned.

Table 41: Ongoing Stakeholder involvement

IMPACT	ONGOING STAKEHOLDER INVOLVEMENT	RESPONSIBILITY
PHASE	DECOMMISSIONING	PROJECT
		COMPANY
ENVIRONMENTAL M	IANAGEMENT PROGRAMME	
	 Community to be notified, as culturally appropriate, timeously of the planned decommissioning, e.g.: Proposed decommissioning start date; and Process to be followed. Recommend that a meeting with community leader(s) be held before decommissioning commence to inform them: What activities will take place during the decommissioning phase. How these activities will impact upon the communities and/or their properties. Regarding the timeframes of scheduled activities Regular interaction between the Project Company and community leader(s) during the decommissioning phase A reporting office/ channel to be established should community members experience problems with contractors/ sub-contractors during the decommissioning phase. A register to be kept of problems reported by community members and the steps taken to address / resolve it. 	

BIOTHERM ENERGY

3.6.2 Community health and safety

Table 42: Community health and safety

IMPACT	COMMUNITY HEALTH AND SAFETY	RESPONSIBILITY
PHASE	DECOMMISSIONING	PROJECT COMPANY
ENVIRONMENTAL	MANAGEMENT PROGRAMME	
MITIGATION	 Demarcated routes to be established for construction vehicles to ensure the safety of communities, especially in terms of road safety and communities to be informed of these demarcated routes. Where dust is generated by trucks passing on gravel roads, dust mitigation measures to be enforced. Any infrastructure that would not be decommissioned must be appropriately locked and/or fenced off to ensure that it does not pose any danger to the community. 	

3.6.3 Waste Management

Table 43: Waste Management

IMPACT	WASTE MANAGEMENT	RESPONSIBILITY
PHASE	DECOMMISSIONING	PROJECT COMPANY
ENVIRONMENTAL	MANAGEMENT PROGRAMME	
MITIGATION	 All decommissioned equipment must be removed from site and disposed of at a registered land fill. Records of disposal must be kept. Turbines must be returned to the manufacturer or relevant recycling agent to be recycled. 	

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3.6.4 Surface and Groundwater

Table 44: Surface and Groundwater

IMPACT	SURFACE AND GROUNDWATER	RESPONSIBILITY
PHASE	DECOMMISSIONING	PROJECT COMPANY
ENVIRONMENTAL MANAGEMENT PROGRAMME		
MITIGATION	Removal of any historically contaminated soil as hazardous waste must be undertaken.	
	2. Removal of hydrocarbons and other hazardous substances by a suitable contractor to reduce contamination risks must be undertaken.	
	3. Removal of all substances which can result in groundwater (or surface water) contamination must be undertaken.	
	4. Re-vegetation of exposed soil surfaces to ensure no erosion in these areas is to be undertaken.	

3.6.5 Biodiversity

Table 45: Biodiversity

IMPACT	BIODIVERSITY	RESPONSIBILITY
PHASE	DECOMMISSIONING	PROJECT
		COMPANY
ENVIRONMENT	AL MANAGEMENT PROGRAMME	,
MITIGATION	Rehabilitation of exposed surfaces with indigenous species.	
	2. Adherence to surface and groundwater mitigation measures to prevent secondary impacts on	
	biodiversity.	
I	3. Prevention of expansion of current footprints.	

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3.6.6 Air Quality

Table 46: Air Pollution

IMPACT	AIR POLLUTION	RESPONSIBILITY
PHASE	DECOMMISSIONING	PROJECT
		COMPANY
ENVIRONMENTAL MANAGEMENT PROGRAMME		
MITIGATION	Regular maintenance of equipment to ensure reduced exhaust emissions	

4 ADDITIONAL MANAGEMENT PLANS

4.1 Alien Invasive Management Plan

Table 47: Alien Invasive Management Plan

Table 47. Alleli lilvasive i	Management Flan
ALIEN INVASIVE MAN	AGEMENT PROGRAMME
MITIGATION	Stockpiles should be kept clear of weeds and alien vegetation growth by regular weeding.
MEASURES	2. Alien vegetation and the spread of exotic species on the site will need to be controlled.
	3. The contractor should be responsible for implementing a programme of weed control (particularly in areas where
	soil has been disturbed); and grassing of any remaining stockpiles to prevent weed invasion.
	4. Herbicide use shall only be allowed according to contract specifications. The application shall be according to set
	specifications and under supervision of a qualified technician. The possibility of leaching into the surrounding
	environment shall be properly investigated and only environmentally friendly herbicides shall be used.
	5. The use of pesticides and herbicides on the site must be discouraged as these can impact on important pollinator
	species of indigenous vegetation.
	6. Six monthly checks of the area should take place for the emergence of invader species.
	7. Mitigation measures mentioned for the construction phase above must be implemented for any maintenance of the
	development that may be undertaken during the operation phase.
	8. Correct rehabilitation with locally indigenous species.
	9. Monitoring programme to ensure that rehabilitation efforts are successful to ensure that risks such as erosion,
	spread of exotic species and the edge effect are avoided.
	10. Constant maintenance of the area to ensure re-colonisation of floral species.
	11. Regular removal of alien species which may jeopardise the proliferation of indigenous species.

BIOTHERM ENERGY

4.2 Plant Rescue and Protection Plan

Table 48: Plant Rescue and Protection Plan

PLANT RESCUE PROTECTION PLAN

MITIGATION MEASURES

- A pre-construction walk-through survey by the biodiversity specialist will be required during a favourable season to locate any protected plants / trees and/or sensitive species and/or ecological feature. This survey must cover the footprint of all proposed infrastructure, including internal access roads. If necessary, shift infrastructure to avoid impacts on species or specific features.
- 2. Vegetation clearing should only commence after the walk-through has been conducted and necessary permits obtained. The Northern Cape Nature Conservation Act permit conditions must also be complied with.
- 3. Vegetation clearing to be kept to a minimum. No unnecessary vegetation to be cleared.
- 4. Vegetation removal must be limited to the wind farm construction site.
- 5. Vegetation to be removed as it becomes necessary rather than removal of all vegetation throughout the site in one step.
- 6. Materials should not be delivered to the site prematurely which could result in additional areas being cleared or affected.
- 7. No vegetation to be used for firewood.
- 8. Gathering of firewood, fruit, muti plants, or any other natural material onsite or in areas adjacent to the site is prohibited unless with prior approval of the ECO.
- 9. Only vegetation within the study area must be removed.
- 10. Vegetation removal must be phased in order to reduce impact of construction.
- 11. Construction site office and laydown areas must be clearly demarcated and no encroachment must occur beyond demarcated areas.
- 12. All natural areas impacted during construction must be rehabilitated with locally indigenous plant species.
- 13. A buffer zone should be established in areas where construction will not take place to ensure that construction activities do not extend into these areas.
- 14. Construction areas must be well demarcated and these areas strictly adhered to.
- 15. The use of pesticides and herbicides in the study area must be discouraged as these impacts on important pollinator species of indigenous vegetation.

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- 16. Soils must be kept free of petrochemical solutions that may be kept on site during construction. Spillage can result in a loss of soil functionality thus limiting the re-establishment of flora.
- 17. The grid access power line must span rocky areas in order to avoid transformation in these areas.
- 18. Soil stockpiles must not become contaminated with oil, diesel, petrol, garbage or any other material, which may inhibit the later growth of vegetation in the soil.

In addition to the above, a detailed Plant Rescue and Protection Plan will be compiled, once the detailed designs are complete and the walk-through survey by the biodiversity specialist has been undertaken. This will only take place if the Wind Farm is authorised by the DEA and issued with a license by the Department of Energy (DoE).

4.3 Re-Vegetation and Habitat Rehabilitation Plan

Table 49: Re-Vegetation and Habitat Rehabilitation Plan

RE-VEGETATION AND	HABITAT	REHABIL	ITATION PLA	٩N

MITIGATION MEASURES

- 1. Re-vegetation should aim to accelerate the natural succession processes so that the plant community develops in the desired way, i.e. promote rapid vegetation establishment.
- 2. Re-vegetation of disturbed surfaces should occur immediately after construction activities are completed. This should be done through seeding with indigenous grasses.
- 3. All damaged areas shall be rehabilitated upon completion of the contract.
- 4. Re-vegetation of the disturbed site is aimed at approximating as near as possible the natural vegetative conditions prevailing prior to construction.
- 5. All natural areas impacted during construction must be rehabilitated with locally indigenous species typical of the representative botanical unit.
- 6. Rehabilitation must take place in a phased approach as soon as possible.
- 7. Rehabilitation process must make use of species indigenous to the area. Seeds from surrounding seed banks can be used for re-seeding.
- 8. Rehabilitation must be executed in such a manner that surface run-off will not cause erosion of disturbed areas.
- 9. Planting of indigenous tree species in areas not to be cultivated or built on must be encouraged.

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- 10. Habitat destruction should be limited to what is absolutely necessary for the construction of the infrastructure, including the construction of new roads. In this respect, the recommendations from the Ecological Specialist Study should be applied strictly. Personnel should be adequately briefed on the need to restrict habitat destruction, and must be restricted to the actual construction area.
- 11. Monitoring programme to ensure that rehabilitation efforts are successful to ensure that risks such as erosion, spread of exotic species and the edge effect are avoided.

4.4 Open Space Management Plan

Table 50: Open Space Management Plan
OPEN SPACE MANAGEMENT PLAN

MITIGATION 1

MEASURES

- 1. A buffer zone should be established in areas where construction will not take place to ensure that construction activities do not extend into these areas.
- 2. Vehicle movement should be restricted to authorised access roads.
- 3. Before construction begins, all areas to be developed must be clearly demarcated with fencing or orange construction barrier where applicable.
- 4. All Construction Camps are to be fenced off in such a manner that unlawful entry is prevented and access is controlled. Signage shall be erected at all access points in compliance with all applicable occupational health and safety requirements. All access points to the Construction Camp should be controlled by a guard or otherwise monitored, to prevent unlawful access.
- 5. The contractor and ECO must ensure compliance with conditions described in the EA.
- 6. Records of compliance/ non-compliance with the conditions of the authorisation must be kept and be available on request.
- 7. Records of all environmental incidents must be maintained and a copy of these records be made available to the national and provincial departments on request throughout the project execution.
- 8. Site establishment shall take place in an orderly manner and all required amenities shall be installed at camp sites before the main workforce move onto site.
- 9. All construction equipment must be stored within this construction camp.

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- 10. An area for the storage of hazardous materials must be established that conforms to the relevant safety requirements and that provides for spillage prevention and containment.
- 11. The Contractor must provide sufficient ablution facilities, in the form of portable / VIP toilets, at the Construction Camps, and shall conform to all relevant health and safety standards and codes. No pit latrines, French drain systems or soak away systems shall be allowed and toilets may not be situated within 100 meters of any surface water body or 1:100 year flood line. A sufficient number of toilets shall be provided to accommodate the number of personnel working in the area.
- 12. The Contractor shall inform all site staff to make use of supplied ablution facilities and under no circumstances shall indiscriminate sanitary activities be allowed.
- 13. No fires will be allowed and the Contractor must make alternative arrangements for heating. LP Gas may be used, provided that all required safety measures are in place. The Contractor shall take specific measures to prevent the spread of veld fires, caused by activities at the campsites. These measures may include appropriate instruction of employees about fire.
- 14. Environmental awareness training for construction staff, concerning the prevention of accidental spillage of hazardous chemicals and oil; pollution of water resources (both surface and groundwater), air pollution and litter control and identification of archaeological artefacts.
- 15. Project manager shall ensure that the training and capabilities of the Contractor's site staff are adequate to carry out the designated tasks.
- 16. Staff should be educated as to the need to refrain from indiscriminate waste disposal and/or pollution of local soil and water resources and receive the necessary safety training.
- 17. Staff must be trained in the hazards and required precautionary measures for dealing with these substances

4.5 Erosion Management Plan

Table 51: Erosion Management Plan

EROSION MANAGMENT PLAN MITIGATION MEASURES 1. To prevent erosion, material stockpiled for long periods (2 weeks) should be retained in a bermed area. 2. Areas which are not to be constructed on within two months must not be cleared to reduce erosion risks. 3. The area to be cleared must be clearly demarcated and this footprint strictly maintained.

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- 4. The necessary silt fences and erosion control measures must be implemented in areas where these risks are more prevalent.
- Wind screening and storm water control should be undertaken to prevent soil loss from the site.
- The use of silt fences and sand bags must be implemented in areas that are susceptible to erosion.
- 7. Other erosion control measures that can be implemented are as follows:
 - a. Brush packing with cleared vegetation
 - b. Mulch or chip packing
 - c. Planting of vegetation
 - d. Hydroseeding / hand sowing
- 8. Sensitive areas need to be identified prior to construction so that the necessary precautions can be implemented.
- 9. All erosion control mechanisms need to be regularly maintained.
- 10. Seeding of topsoil and subsoil stockpiles to prevent wind and water erosion of soil surfaces.
- 11. Retention of vegetation where possible to avoid soil erosion.
- 12. Vegetation clearance should be phased to ensure that the minimum area of soil is exposed to potential erosion at any one time.
- 13. Re-vegetation of disturbed surfaces should occur immediately after construction activities are completed. This should be done through seeding with indigenous grasses that were present on site prior to construction.
- 14. No impediment to the natural water flow other than approved erosion control works is permitted.
- 15. To prevent storm water damage, the increase in storm water run-off resulting from construction activities must be estimated and the drainage system assessed accordingly.
- 16. Stockpiles not used in three (3) months after stripping must be seeded to prevent dust and erosion.

4.6 Storm Water Management Plan

A Storm Water Management Plan cannot be compiled until the detailed designs are complete, which will only take place if the Wind Farm is authorised by the DEA and issued with a license by the Department of Energy (DoE). It is stipulated in the in this EMPr that a Storm Water Management Plan must be compiled before any construction commences and implemented during the construction phase. Refer to Section 3.4.7.

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4.7 Monitoring System

Table 52: Monitoring System

MONITORING SYSTEM

MITIGATION MEASURES

- 1. Monitoring should be undertaken to evaluate the success of mitigation measures. Monitoring methods must be in accordance with features that need to be monitored.
- 2. An area for the storage of hazardous materials must be established that conforms to the relevant safety requirements and that provides for spillage prevention and containment.
- 3. Environmental awareness training for construction staff, concerning the prevention of accidental spillage of hazardous chemicals and oil; pollution of water resources (both surface and groundwater), air pollution and litter control.
- Spillage packs must be available at construction areas.
- 5. Proper storage facilities for the storage of oils, paints, grease, fuels, chemicals and any hazardous materials to be used must be provided to prevent the migration of spillage into the ground and groundwater regime around the temporary storage area(s). These pollution prevention measures for storage should include a bund wall high enough to contain at least 110% of any stored volume, and this should be sited away from drainage lines in a site with the approval of the Project Manager. The bund wall must be high enough to contain 110% of the total volume of the stored hazardous material with an additional allocation for potential storm water events.
- These storage facilities (including any tanks) must be on an impermeable surface that is protected from the ingress of storm water from surrounding areas in order to ensure that accidental spillage does not pollute local soil or water resources.
- 7. An approved waste disposal contractor must be employed to remove and recycle waste oil, if practical. The contractor must ensure that its staff is made aware of the health risks associated with any hazardous substances used and has been provided with the appropriate protective clothing/equipment in case of spillages or accidents and have received the necessary training.
- 8. Where contamination of soil is expected, analysis must be done prior to disposal of soil to determine the appropriate disposal route. Proof from an approved waste disposal site where contaminated soils are dumped if and when a spillage / leakage occur should be attained and given to the project manager.
- 9. Topsoil and subsoil to be protected from contamination. This should be monitored on a monthly basis by a visual inspection of diesel/oil spillage and pollution prevention facilities.

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- 10. Concrete and chemicals must be mixed on an impervious surface and provisions should be made to contain spillages or overflows into the soil.
- 11. Relevant departments and other emergency services should be contacted in order to deal with spillages and contamination of aquatic environments.
- 12. Soils must be kept free of petrochemical solutions that may be kept on site during construction. Spillage can result in a loss of soil functionality thus limiting the re-establishment of flora.

4.8 Traffic Management Plan

Table 53: Traffic Management Plan

TRAFFIC MANAGEMENT PLAN

MITIGATION MEASURES

- 1. A designated transport coordination manager should be appointed to oversee and manage the traffic safety officers. Additionally, the designated transport coordination manager should inform and keep up-to-date the interested and affected parties of all the activities taking place that may have a direct impact on them.
- A traffic safety officer shall be nominated to make all the necessary arrangements to maintain the required traffic
 measures for the duration of the project. The safety officer shall liaise daily with the transportation coordination
 manager to keep them apprised of the state of all the traffic arrangements.
- All construction traffic shall comply with the legal load requirements as outlined in the National Road Traffic Act and National Road Traffic Regulations.
- 4. Construction traffic entering the site along busy public roads should be limited to times when peak hour traffic can be avoided. The peak traffic occurs during 7h00 to 8h30, and 16h00 to 17h30. Construction traffic can also be restricted further to avoid travelling on public holidays, long weekends, or at night.
- During periods of high construction traffic entering and exiting the site, it is recommended that flagmen help direct the traffic. This will enable the safe movement of construction and public traffic at the entrance and reduce the number of potential conflicts.
- 6. The South African Road Traffic Signs Manual (SARTSM), Volume 2, June 1999 is to be used for all traffic during the construction activities of the proposed project.

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- 7. Any damage caused by the construction vehicles to the existing road infrastructure shall be repaired in kind, prior to the completion of the project.
- 8. A dust suppression system for the gravel roads shall be in place to prevent excessive dust from the traffic polluting the air.
- 9. Trucks should to stop at regular intervals to allow queuing vehicles to pass.

4.9 Transportation Management Plan

Table 54: Transportation Management Plan

TRANSPORTATION MANAGEMENT PLAN

- MITIGATION MEASURES
- 1. For each convoy of abnormal vehicles/loads a designated safety officer shall be nominated.
- 2. All vehicles used during the transport of materials and in the construction activities are required to be roadworthy per the National Road Traffic Act (NRTA) and display all pertinent certificates as required.
- 3. For any vehicles that operate under an exemption permit, a roadworthy certificate may not be required; however the exemption permit will require that the vehicle is fit for operation on public roadways.
- 4. All vehicles travelling to and from the site shall adhere to all laws imposed by the law enforcement agencies, and shall comply with any requests made by the law enforcement officials.
- 5. All construction vehicles that are entering the site shall also be available via radio or telephone communication to the transport coordination manager. So that in the event of an emergency, all vehicles can be accounted for.
- 6. During the delivery of the wind turbine components, the person in charge shall be in communication with transport coordination manager, so that he/she may keep track and document the progress of the vehicles to facilitate any issues that may arise during the transportation phase.
- 7. All vehicles shall comply with the posted speed limits on public roads as well as the speed limits within the development.
- 8. All abnormal vehicles and loads to be transported are required to have a valid permit before any trip is begun.
- 9. SANRAL Western & Southern Region will need to be contacted in order to obtain consent for the abnormal load transport on their roadways.

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- 10. An escort is required to accompany the abnormal vehicle to warn the normal travelling public and to promote the safe flow of traffic if the normal flow of traffic is disrupted by the abnormal vehicle.
- 11. Construction vehicles delivering raw materials to the site shall be covered to prevent any debris along the roads.

A Traffic Study and Impact Assessment was conducted by Dirk van der Merwe of Bvi Consulting Engineers for the proposed Aletta wind energy facility. These studies should be considered when determining the transportation route for the project during the construction phase. A detailed traffic management plan will be completed, once the exact turbine specifications are known which will only be determined, once the Wind Farm is authorised by the DEA and issued with a license by the DoE.

4.10 Fire Management Plan

The intent of a Fire Management Plan (FMP) is to guide through fire safety requirements, the construction and operation of a Wind Energy Facility, that is defensible from wildfire and, in turn, does not represent significant threat of ignition source for the surrounding native habitat.

It must be noted that during extreme fire conditions, there are no guarantees that a given structure will not burn. Precautions and mitigating measures identified in this plan are designed to reduce the likelihood that fire would impinge upon the proposed structures as well as minimise the impact of fires if they do occur. This FMP does not guarantee that fire will not occur in the area or that fire will not damage property or cause harm to persons or their property.

BioTherm relies heavily on the co-operation and proactive participation between managers, employees and contractors to maintain a high level of Fire safety awareness at all times together with the procedural ramifications in case of an emergency.

This management plan is also a reflection of BioTherm Energy's commitment towards the constant safeguarding of employees' against Fire hazards, whilst complying with the requirements of the Fire Safety Act, 6 of 2002 and Occupational Health and Safety Act, 85 of 1993.

BIOTHERM ENERGY

4.10.1 Fire and Maintenance of Access Roads for Solar Facility

- A primary access and escape route will be visible and known to all who visit the facility and will be controlled by a security gate.
- There will be other dedicated secondary gravel roads leading to/from the project site to/from the primary access.
- There will be more than one vehicular access gate leading into the project.
- An escape route map with safe gathering points need to be visible at all the entrance gates for anyone to familiarise themselves upon entry (and will be provided prior to construction once the final facility layout and building plans have been approved by the appropriate department/authority).

4.10.2 Fire Safety Act, 6 of 2002

A copy of the fire safety act is to be available at the facility for everyone's easy access purposes.

4.10.3 Principles of Fire Safety

The aims of implementing measures to limit the incidences and spread of fire are:

- To ensure the safety of people, minimising loss of life and injury.
- To minimise loss of and damage to property and possessions.
- To minimise the negative impact on the environment.
- To safely and effectively extinguish fire when needed

4.10.4 Requirements in Terms of the South African Bureau of Standards (SABS)

All buildings erected within the boundaries of South Africa, from a fire safety point of view should comply with the SABS 0400:1990- The application of the National Building Regulations. The following requirements are appropriate and can be adapted for planning and design of buildings. Any building shall be so designed, constructed and equipped that in case of fire:

• The protection of occupants or users therein is ensured and that provision is made for the safe evacuation of such occupants of users.

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- The spread and intensity of such fire within such buildings and the spread of fire to any other building will be minimised.
- Adequate means of access and equipment for detecting, fighting, controlling and extinguishing such fire are adapted.

4.10.5 Management Commitment

It will be the responsibility of managers to:

- Enforce such measures as may be necessary in the interest of the preservation of employee's safety including safety against fire.
- Permit employees to perform work only once the precautionary measures are put in place.
- Provide the necessary supervision to staff to ensure that precautionary measures are maintained.
- Ensure that the staff is adequately trained in fire procedures.
- Ensure that all staff is informed regarding their scope of authority.
- Ensure that the FMP is reviewed and updated regularly to meet the projects needs at that particular point in time.
- Ensure that the firefighting equipment is regularly serviced.
- Make sure that the FMP forms part of the facility induction which will be made compulsory for each new member to the facility to attend.

4.10.6 Employees' Contribution to Fire Management

The successful implementation of the FMP will require the full co-operation of every employee.

In this regard it will be expected of every employee to:

- Take care of the fire detection and fire protection systems and equipment.
- Any other Contractor or subcontractor to co-operate and ensure that any duty or requirement imposed on BioTherm, as the employer, through legislation, is complied with.
- Carry out any lawful order given to him/her and obey the fire procedures laid down, or authorised thereto, by BioTherm in the interest of health and fire safety.
- Report any situation which may cause fire to the supervisor and/or Health and Safety Representative.

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Be able to make recommendations to the relevant Safe and Healthy representative who will take the recommendation into consideration and if agreed upon then implemented.

4.10.7 Fire Prevention/Control

The following preliminary measures will be taken to try and prevent and/or control fires on site:

- Smoking and open flames will be prohibited in areas near flammable and/or combustible materials.
- Fire Fighting equipment will be sufficiently available on site and must comply with the relevant legislation.
- All equipment will be serviced annually and pressure tested every five years.

4.10.8 Response

- The facility must at all times have emergency numbers readily available to all employees and staff. These include the fire department as well as emergency care numbers to make sure that fires are quickly extinguished when they occur as well as the victims (if any) are medically treated and taken to a nearby hospital or clinic if needs be.
- The staff will be trained to use the firefighting equipment for small fires that can be contained but alternatively if the fire cannot be contained, the appropriate authorities should be contacted to assist in extinguishing the fire.
- If the fire cannot be contained, workers should clear the site in an orderly manner lead by a trained Health and Safety representative.
- During construction phase, fire protection measures like placing fire extinguishers on site are compulsory before any hot work can commence
 or where any flammable substances are present.
- During operation phase, Fire protection equipment like Fire Extinguishers will be situated at carefully selected locations for easy access during an emergency.

4.10.9 Management Plan

The following will form the key elements of the FMP:

Legal Compliance

BIOTHERM ENERGY

 A work place that is safe and without risk to the health and safety of employees in compliance with the requirements of the Occupational Health and Safety Act 85 of 1993 and its regulations as well as the Fire Safety Act, 6 of 2002.

Fire hazard identification and risk assessment

- o Identify any fire hazards and risks, then determine the extent and impact.
- Endeavour to eliminate fire hazards and alternatively develop control measures to contain the fires.

Fire Safety, Health and Environmental Proficiency

- Make employees conversant with the fire hazards to their health and safety and the precautionary measures required with respect to these hazards through regular awareness.
- Incorporate and discuss Fire Safety into the daily Toolbox talks.

Written Safe Word Procedures

Develop written safe work procedures for all fire high risks and provide the necessary training to employees if needs be.

Training and Education

- Include the fire management plan in all Health and Safety training as well as assessments and provide the necessary training and awareness to all categories of employees.
- Provide awareness and training to all new employees including temporary employees and contractors on site.

Prevention

- Suitable preventative measures against exposure to hazards are an integral part of daily activities.
- o Personnel protective equipment should be provided for the protection of employees when necessary.
- Corrective and/or fire preventative measures should be put in place.

Elimination of Fire Incidents

The elimination of fire incidents, including injuries on duty to which employees and the public can be exposed to will be achieved through the proper investigation of any fire incidents. Factors which cause any fire incidences will be determined and then corrective and preventative measures will be developed and implemented in liaison with all relevant stakeholders.

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First Aid Kit

- A first aid kit will be available on site which will contain all the necessary medication (e.g. pain medication) and equipment to pretreat any fire injury depending on the magnitude of the injury. If the injury is too severe, the victim should be taken to the nearest hospital or clinic to be treated by professionals and not treated on site.
- There will be a sufficient number of employees trained in first aid medical assistance in case of small controllable fire incidents occurring on site.

Machinery, Plant and Equipment

- All mechanical equipment will be safeguarded in order to protect the health and safety of persons that may be exposed to such equipment.
- Regular maintenance of all equipment (including firefighting equipment) and inspections will be recorded.
- Only equipment that is safe and in working condition will be used by the employees. Equipment is to be inspected every day before
 use.

Sub-Contractors

- Sub-contractors will sign an agreement with the Developer to ensure their compliance with the FMP.
- Sub-contractors will work according to the Health and Fire Safety standards.

4.11 Environmental Awareness Plan

Legislation requires that a company who prepares an environmental management program must develop an environmental awareness plan describing the manner in which the company intends to inform his or her employees of any environmental risks which may result from their work and the manner in which the risks must be dealt with in order to avoid pollution or the degradation of the environment. In recognition of the need to protect our environment, environmental management should not only be seen as a legal obligation but also as a moral obligation.

This Environmental Awareness Plan is intended to create the required awareness and culture with personnel and contractors/service providers on environmental safety and health issues associated with the mining and beneficiation activities.

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4.11.1 Policy on Environmental Awareness

This Environmental Awareness Plan must serve as the basis for the induction of all new employees (as well as contractors pending the nature of their work on site) on matters as described herein and read in conjunction with the EMPr. The Plan will also be used to hone awareness of all employees on a continuous basis.

Specific environmental awareness performance criteria will also form part of the job descriptions of employees, to ensure diligence and full responsibility at all levels of the organisational work force.

4.11.2 Implementation of Environmental Awareness

General environmental awareness will be fostered among the project's workforce to encourage the implementation of environmentally sound practices throughout its duration. This will ensure that environmental accidents are minimised and environmental compliance maximised.

Environmental awareness will be fostered in the following manner:

- Induction course for all workers on site, before commencing work on site.
- Refresher courses as and when required.
- Daily toolbox talks at the start of each day with all workers coming on site, where workers can be alerted to particular environmental concerns
 associated with their tasks for that day or the area/habitat in which they are working.
- Displaying of information posters and other environmental awareness material in the general assembly points.

4.11.3 Training and awareness

The MC is to take responsibility for the management of their staff and subcontractors on the project site during the construction phase and supervise them closely at all times. The onus is on the MC to make sure that all their staff and subcontractors fully comprehend the contents of the EMPr. The MC shall organise environmental awareness training programmes, which should, be targeted at the two levels of employment: management and labour.

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4.11.4 Training of construction workers

All construction staff must receive basic training in environmental awareness, including the storage and handling of hazardous substances, minimisation of disturbance to sensitive areas, management of waste, and prevention of water pollution. They must be informed of how to recognise historical / archaeological artefacts that may be uncovered. They must also be appraised of the EMPr's requirements. Environmental awareness training programmes need to be formulated for these levels and must comprise:

- A record of all names, positions and duties of staff to be trained;
- A framework for the training programmes;
- A summarised version of the training course(s); and
- An agenda for the delivery of the training courses.

Such programmes will set out the training requirements, which need to be conducted prior to any construction works occurring and will include:

- Acceptable behaviour with regard to flora and fauna;
- Management and minimising of waste, including waste separation;
- Maintenance of equipment to prevent the accidental discharge or spill of fuel, oil, lubricants, cement, mortar and other chemicals;
- Responsible handling of chemicals and spills;
- Environmental emergency procedures and incident reporting; and
- General code of conduct towards I&APs.

The ECO may be requested to provide additional training (in a first language) on-site regarding environmental aspects that are unclear to the construction personnel. A translator may be required and requested to assist in this additional training. The cost for the translator will be borne by the MC.

5 CONCLUSION

The environmental and social impacts of the project were identified through the four project phases (preconstruction, construction, operation and decommissioning). Both positive and negative project impacts have been identified. The following section briefly describes some of the major impacts and proposed mitigation measures within each of the project phases.

5.1 Pre-Construction Phase

The first site activities before mobilization of equipment will be a survey, required for final design of the wind energy facility foundations and other infrastructure. There will be negative impacts on land associated with the construction of camps (temporary loss) and storage of construction materials (temporary loss), and foundations for the buildings (permanent loss) and wind turbines. Expectations of improvement in livelihood among locals should be addressed through public participation. Construction contracts will include environmental monitoring and management procedures and requirements. These must be in place prior to the commencement of any construction activities. Once the final site has been selected for the wind energy facility and the layout plans have been finalised a detailed geotechnical investigation should be undertaken.

5.2 Construction Phase

This phase of the activity will have both positive and negative impacts. The positive impacts are employment opportunities offered to the construction workers and any other labourer who will be hired to provide their services during the construction phase. The negative impacts would include wastes generated, accidents, health and safety, air, dust and noise pollution, vegetation clearance, soil erosion, socio-environmental issues, loss of vegetation, and compaction of soil. Most of the negative impacts are minor and temporary and the significance of the impacts can be greatly reduced by the implementation of mitigation measures, which are outlined in this EMPr. The contractor shall ensure that all staff have adequate protective clothing and are adequately trained.

5.3 Operational Phase

The proposed project will have minimal negative effects which mainly relates to loss of aesthetic value and habitat. The habitat that will be lost is not regarded as pristine and therefore, is not viewed as significant. Most of the negative impacts are minor and the significance of the impacts can be greatly reduced by the implementation of mitigation measures, which are outlined in this EMPr.

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5.4 Decommissioning Phase

As with any project, the facilities used in this project will have a lifetime after which they may no longer be cost effective to continue with operation. At that time, the project would be decommissioned, and the existing equipment removed.

Potential environmental impacts caused during decommissioning are those, which will be mitigated as provided by the Environmental Management Programme. These include: noise and emissions to the surrounding environment, removal of hazardous waste and substances, fire, oil spills, wastes and public safety.

The disposal of materials from the decommissioned facility is not viewed as high risk. Much of the material would be recyclable (steel structures etc.) or inert (concrete foundations, etc.). These materials would however, need to be disposed of at a formal waste disposal or recycling centre.

Based on the above information, it is unlikely that the Project will have significant adverse social and environmental impacts. Most adverse impacts will be of a temporary nature during the construction phase and can be managed to acceptable levels with implementation of the recommended mitigation measures for the Project such that the overall benefits from the Project will greatly outweigh the few adverse impacts.

All the negative impacts could be easily mitigated. Generally, the proposed wind energy facility will result in appreciable benefits to the people in the project area of influence and bring opportunities for development to the country.

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Annexure A

Environmental Incidents

LOG Environmental Incident Log

	ENVIRONMENTAL INCIDENT LOG			
Date	Env. Condition	Comments (Include any possible explanations for current condition and possible responsible parties. Include photographs, records etc. if available)	(Give details and attach documentation	Signature

Complaints Record Sheet

Complaints Record Sheet

COMPLAINTS RECORD SHEET	File Ref:	DATE:	
COMPLAINT RAISED BY:			
CAPACITY OF COMPLAINANT:			
COMPLAINT RECORDED BY:			
COMPLAINT:			
PROPOSED REMEDIAL ACTION:	.		
ECO: Da	ate:		
NOTES BY ECO:			
ECO: Date:	Site Manager:	Date:	

Annexure B

Management of Soils: Guidelines

Topsoil

Source of topsoil

- Topsoil shall be stripped from all areas that are to be utilised during the construction period and where permanent structures and access is required. These areas will include temporary and permanent access roads, construction camps, and lay down areas. Topsoil shall be stripped after clearing of woody vegetation and before excavation or construction commences.
- The topsoil is regarded as the top 300mm of the soil profile irrespective of the fertility appearance, structure, agricultural potential, fertility and composition of the soil.

Topsoil stripping

- Soil shall be stripped to a minimum depth of 150mm and maximum depth of 300mm or to the depth of bedrock where soil is shallower than 300mm. Herbaceous vegetation, overlying grass and other fine organic matter shall not be removed from the stripped soil.
- No topsoil which has been stripped shall be buried or in any other way be rendered unsuitable for further use by mixing with spoil or by compaction using machinery.
- Topsoil shall preferably be stripped when it is in a dry condition in order to prevent compaction.

Topsoil stockpiling

- The Consulting Engineer or Environmental Control Officer shall stockpile stripped topsoil in areas, which have been approved. Soil stockpiles may take the form of windows.
- To prevent erosion, material stockpiled for long periods (2 weeks) should be retained in a bermed area.
- Topsoil, mulch and subsoil stockpiles must be placed in higher-lying areas of the sit, and must not be positioned within storm water channels or areas of ponding.
- Topsoil stripped from different soil zones shall be stockpiled separately and clearly identified as such. Under no circumstances shall topsoil obtained from different soil zones be mixed.
- Soil stockpiles shall not be higher than 3m or stored for a period longer than one year. The slopes of soil stockpiles shall not be steeper than 1 vertical to 2.5 horizontal.
- No vehicles shall be allowed access onto the stockpiles after they have been placed.
 Topsoil stockpiles shall be clearly demarcated in order to prevent vehicle access and for later identification when required.
- Soil stockpiles must not become contaminated with oil, diesel, petrol, garbage or any other material, which may inhibit the later growth of vegetation in the soil.

 After topsoil removal has been completed, the Contractor shall apply soil conservation measures to the stockpiles where and as directed by the Consulting Engineer or Environmental Control Officer. This may include the use of erosion control fabric or grass seeding.

Topsoil replacement

- Topsoil shall be replaced to a minimum depth of 75mm over all areas where it has been stripped and over disused borrow pits, after construction in those areas has ceased.
 Topsoil placement shall follow as soon as construction in an area has ceased.
- All areas onto which topsoil is to be spread shall be graded to the approximate original landform with maximum slopes of 1:25 and shall be ripped prior to topsoil placement. The entire area shall be ripped parallel to the contours to a minimum depth of 300mm.
- Topsoil shall be placed in the same soil zone from which it had been stripped. However, if there is insufficient topsoil available from a particular soil zone to produce the minimum specified depth, topsoil may be brought from other soil zones at the approval of the Consulting Engineer or Environmental Control Officer.
- Where topsoil that has been stripped by the Contractor is insufficient to provide the minimum specified depth, the Contractor shall obtain suitable substitute material from other sources at no cost to the employer. The suitability of the substitute material shall be determined by means of soil analyses, which are acceptable to the Consulting Engineer or Environmental Control Officer.
- No vehicles shall be allowed access onto or through topsoil after it has been reinstated.
- After topsoil reinstatement is complete, cleared and stockpiled vegetative matter shall be spread randomly by hand over the top soiled area. The vegetative material must be replaced on the areas from where it has been removed.

Annexure C

Eskom Requirements for Work in or near Eskom Servitudes

- 1. Eskom's rights and services must be acknowledged and respected at all times.
- 2. Eskom shall at all times retain unobstructed access to and egress from its servitudes.
- Eskom's consent does not relieve the developer from obtaining the necessary statutory, land owner or municipal approvals.
- 4. Any cost incurred by Eskom as a result of non-compliance to any relevant environmental legislation will be charged to the developer.
- 5. If Eskom has to incur any expenditure in order to comply with statutory clearances or other regulations as a result of the developer's activities or because of the presence of his equipment or installation within the servitude restriction area, the developer shall pay such costs to Eskom on demand.
- 6. The use of explosives of any type within 500 metres of Eskom's services shall only occur with Eskom's previous written permission. If such permission is granted the developer must give at least fourteen working days' prior notice of the commencement of blasting. This allows time for arrangements to be made for supervision and/or precautionary instructions to be issued in terms of the blasting process. It is advisable to make application separately in this regard.
- 7. Changes in ground level may not infringe statutory ground to conductor clearances or statutory visibility clearances. After any changes in ground level, the surface shall be rehabilitated and stabilised so as to prevent erosion. The measures taken shall be to Eskom's satisfaction.
- 8. Eskom shall not be liable for the death of or injury to any person or for the loss of or damage to any property whether as a result of the encroachment or of the use of the servitude area by the developer, his/her agent, contractors, employees, successors in title, and assignees. The developer indemnifies Eskom against loss, claims or damages including claims pertaining to consequential damages by third parties and whether as a result of damage to or interruption of or interference with Eskom's services or apparatus or otherwise. Eskom will not be held responsible for damage to the developer's equipment.
- 9. No mechanical equipment, including mechanical excavators or high lifting machinery, shall be used in the vicinity of Eskom's apparatus and/or services, without prior written permission having been granted by Eskom. If such permission is granted the developer must give at least seven working

days' notice prior to the commencement of work. This allows time for arrangements to be made for supervision and/or precautionary instructions to be issued by the relevant Eskom Manager

Note: Where and electrical outage is required, at least fourteen work days are required to arrange it.

10. Eskom's rights and duties in the servitude shall be accepted as having prior right at all times and

shall not be obstructed or interfered with.

11. Under no circumstances shall rubble, earth or other material be dumped within the servitude

restriction area. The developer shall maintain the area concerned to Eskom's satisfaction. The developer shall be liable to Eskom for the cost of any remedial action which has to be carried out

by Eskom.

12. The clearances between Eskom's live electrical equipment and the proposed construction work

shall be observed as stipulated by Regulation 15 of the Electrical Machinery Regulations of the

Occupational Health and Safety Act, 1993 (Act 85 of 1993).

13. Equipment shall be regarded electrically live and therefore dangerous at all times.

14. In spite of the restrictions stipulated by Regulation 15 of the Electrical Machinery Regulations of

the Occupational Health and Safety Act, 1993 (Act 85 of 1993), as an additional safety precaution, Eskom will not approve the erection of houses, or structures occupied or frequented by human

beings, under the power lines or within the servitude restriction area.

15. Eskom may stipulate any additional requirements to highlight any possible exposure to Customers

or Public to coming into contact or be exposed to any dangers of Eskom plant.

16. It is required of the developer to familiarise himself with all safety hazards related to Electrical plant.

17. Any third party servitudes encroaching on Eskom servitudes shall be registered against Eskom's

title deed at the developer's own cost. If such a servitude is brought into being, its existence should

be endorsed on the Eskom servitude deed concerned, while the third party's servitude deed must

also include the rights of the affected Eskom servitude.

John Geeringh (Pr Sci Nat)

Senior Environmental Advisor

Eskom GC: Land Development

Annexure D

Heritage Management Guidelines and Requirements

In areas where there has not yet been a systematic survey to identify conservation worthy places, a permit is required to alter or demolish any structure older than 60 years. This will apply until a survey has been done and identified heritage resources are formally protected.

Archaeological and palaeontological sites, materials, and meteorites are the source of our understanding of the evolution of the earth, life on earth and the history of people. In the new legislation, permits are required to damage, destroy, alter, or disturb them. People who already possess material are required to register it. The management of heritage resources are integrated with environmental resources and this means that before development takes place heritage resources are assessed and, if necessary, rescued.

In addition to the formal protection of culturally significant graves, all graves, which are older than 60 years and are not in a cemetery (such as ancestral graves in rural areas), are protected. The legislation protects the interests of communities that have interest in the graves: they may be consulted before any disturbance takes place. The graves of victims of conflict and those associated with the liberation struggle will be identified, cared for, protected and memorials erected in their honour.

Anyone who intends to undertake a development must notify the heritage resource authority and if there is reason to believe that heritage resources will be affected, an impact assessment report must be compiled at the developer's cost. Thus, developers will be able to proceed without uncertainty about whether work will have to be stopped if an archaeological or heritage resource is discovered.

According to the National Heritage Act (Act 25 of 1999 section 32) it is stated that:

An object or collection of objects, or a type of object or a list of objects, whether specific or generic, that is part of the national estate and the export of which SAHRA deems it necessary to control, may be declared a heritage object, including –

- objects recovered from the soil or waters of South Africa, including archaeological and palaeontological objects, meteorites and rare geological specimens;
- visual art objects;
- military objects;
- numismatic objects;
- objects of cultural and historical significance;
- objects to which oral traditions are attached and which are associated with living heritage;
- objects of scientific or technological interest;
- books, records, documents, photographic positives and negatives, graphic material, film or video or sound recordings, excluding those that are public records as defined in section 1 (xiv) of the National Archives of South Africa Act, 1996 (Act No. 43 of 1996), or in a provincial law pertaining to records or archives; and
- any other prescribed category.

Under the National Heritage Resources Act (Act No. 25 of 1999), provisions are made that deal with, and offer protection, to all historic and pre-historic cultural remains, including graves and human remains.

Graves and cemeteries

Graves younger than 60 years fall under Section 2(1) of the Removal of Graves and Dead Bodies Ordinance (Ordinance no. 7 of 1925) as well as the Human Tissues Act (Act 65 of 1983) and are the jurisdiction of the National Department of Health and the relevant Provincial Department of Health and must be submitted for final approval to the Office of the relevant Provincial Premier. This function is usually delegated to the Provincial MEC for Local Government and Planning, or in some cases the MEC for Housing and Welfare. Authorisation for exhumation and reinterment must also be obtained from the relevant local or regional council where the grave is situated, as well as the relevant local or regional council to where the grave is being relocated. All local and regional provisions, laws and by-laws must also be adhered to. In order to handle and transport human remains the institution conducting the relocation should be authorised under Section 24 of Act 65 of 1983 (Human Tissues Act).

Graves older than 60 years, but younger than 100 years fall under Section 36 of Act 25 of 1999 (National Heritage Resources Act) as well as the Human Tissues Act (Act 65 of 1983) and are the jurisdiction of the South African Heritage Resource Agency (SAHRA). The procedure for Consultation Regarding Burial Grounds and Graves (Section 36(5) of Act 25 of 1999) is applicable to graves older than 60 years that are situated outside a formal cemetery administrated by a local authority. Graves in the category located inside a formal cemetery administrated by a local authority will also require the same authorisation as set out for graves younger than 60 years over and above SAHRA authorisation.

If the grave is not situated inside a formal cemetery but is to be relocated to one, permission from the local authority is required and all regulations, laws and by-laws set by the cemetery authority must be adhered to.



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Appendix E

PATH LOSS AND ELECTRICAL DESIGN CHANGE EVALUATION OF ACCIONA AW125 TH100A WIND TURBINE



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6556DOCUMENT NUMBER	ISSUE	SYSTEM
WP 7787/18	1.1	Renewable Energy

SUBJECT

Path loss and electrical design change evaluation of the Acciona AW125 TH100A wind turbine for Aletta Windfarm

KEYWORDS

Measurements, predictions, radio telescope, receivers, renewable energies, RFI, SKA

DISTRIBUTION

Biotherm Energy (Pty) Ltd

CONCLUSIONS

The change in hub height and minor electrical differences between the AW125 TH100A and AW 140/3465 TH120 does not impact on the mitigation requirements as set out in the Path Loss and Risk Assessment Report for New Aletta Windfarm Layout Including Emission Control Plan for the AW125 TH 100A WTG (CP6778/16)

AUTHOR	SIGNATURE
CFH Fouche	Harche'
DATE	19 February 2019
APPROVED	SIGNATURE
S Joubert	
DATE	19 February 2019

ACRONYMS AND ABBREVIATIONS

СР	Control Plan
SKA	Square Kilometre Array
WTG	Wind Turbine Generator

REFERENCES

CP 6778/16	PATH LOSS AND RISK ASSESSMENT REPORT FOR NEW ALETTA WINDFARM LAYOUT INCLUDING EMISSION CONTROL PLAN FOR THE
	AW125 TH100A WTG – ITC Services

1. BACKGROUND

Since drafting the Electromagnetic Control Plan (CP 6778/16) for the Aletta Windfarm in 2016, the turbine of choice for the development has changed from the Acciona Model AW3000/125 TH100 50Hz wind turbine to Acciona Model AW 140/3465 TH120.

In order to confirm the validity of the proposed mitigation measures, the Acciona Engineering department issued a comparison between the two turbine models to confirm the electrical similarity.

The path loss calculations were repeated at a hub height of 100m and 120m to confirm the attenuation requirements and to ensure no discrepancy would arise due to location variations.

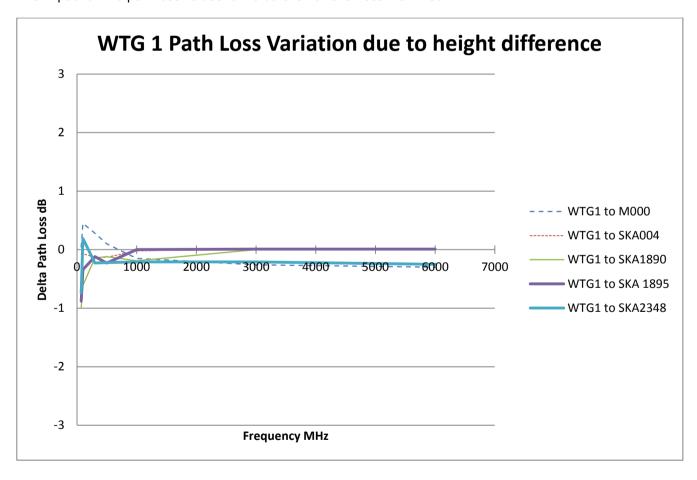
2. AIM

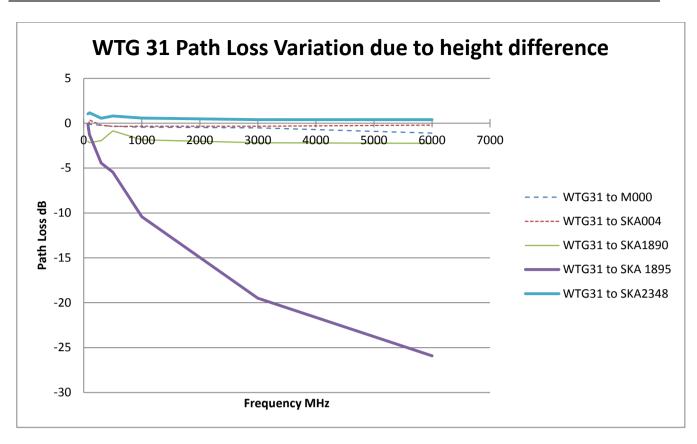
The aim of this work package is to confirm the mitigation requirements for the Aletta Windfarm when the new Acciona Model is used.

3. PATH LOSS COMPARISON

Little impact on the path loss values was found due to the increase of the hub height from 100m to 120m except in the case of WTG 31 to SKA 1895 where the 20m height difference caused a 26dB reduction in path loss.

The impact on the path loss values to the core is however less than 1.5dB.





Although there is a 26 dB reduction in path loss due to the hub height change, the initial mitigation requirements in CP 6778/16 was based on a minimum path loss of 134dB @ 6GHz whereas the reduced path loss of WTG 31 to SKA 1895 is still 136dB (2dB more than the previous minimum).

4. ELECTRICAL PARAMETER COMPARISON

The design change statement from Acciona (manufacturer) is attached as Appendix A.

5. CONCLUSION

The change in hub height and minor electrical differences between the AW125 TH100A and AW 140/3465 TH120 does not impact on the mitigation requirements as set out in the Path Loss and Risk Assessment Report for New Aletta Windfarm Layout Including Emission Control Plan for the AW125 TH 100A WTG (CP6778/16).

6. APPENDIX A: DESIGN CHANGE STATEMENT



Nordex Energy South Africa (RF) Proprietary Ltd 80 McKenzie Street, Gardens, Cape Town, 8001

BioTherm Energy (Pty) Ltd Building 1, Ground Floor Design Quarter District Leslie Ave East, Fourways, Johannesburg, 2055

Aletta Windfarm AW125/3000 TH100 & AW140/3000 TH120 & AW140/3465 TH120

Attn: Mr. Michael Barnes

Pamplona, February 19, 2019

Attending to the request of BioTherm, Nordex informs that the turbines AW125/3000 TH100, AW140/3000 TH120 and AW140/3465 TH120 have similar electrical capabilities and that the main changes among them are only structural. These three turbines share the same components that were previously identified as the main electromagnetic emitters being the main difference that the tower height of the AW140 is 20m higher than the AW125, all as more particularly described in the Annex 1.

According to Nordex experience, notwithstanding that Aletta's control plan and path loss calculation shall be updated, we don't foresee risk of increasing the electromagnetic emissions of the windfarm or that additional mitigation measures shall be developed to fulfill the SKA requirements.

Kind regards on behalf and in the name of Nordex Energy South Africa (RF) (PTY) Ltd

Núñez Polo, Miguel 2019.02.19 15:30:48 +01'00'

Miguel Núñez Polo R&D&i Director

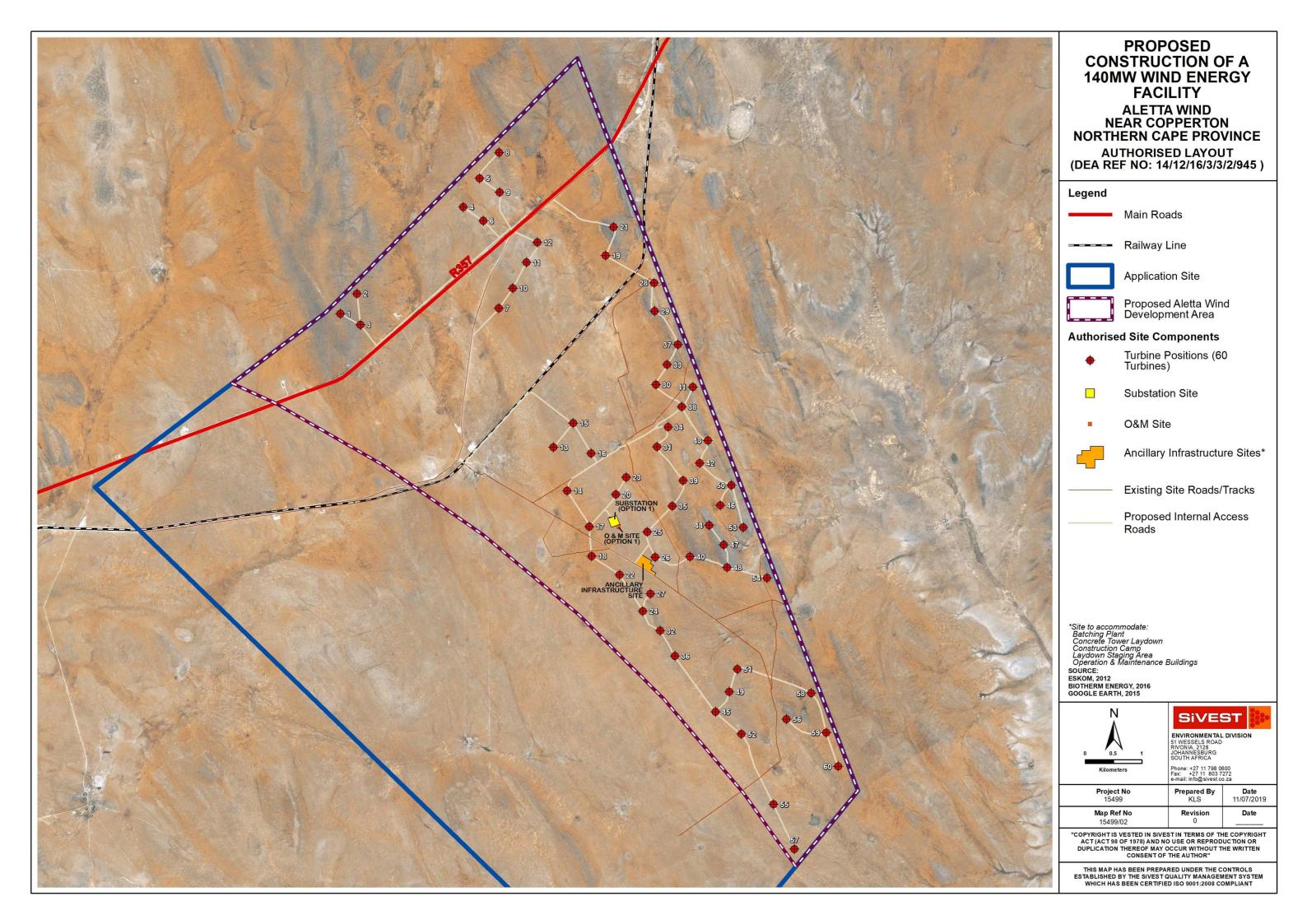
ANNEX 1: AW125, AW140 TECHNICAL REVIEW

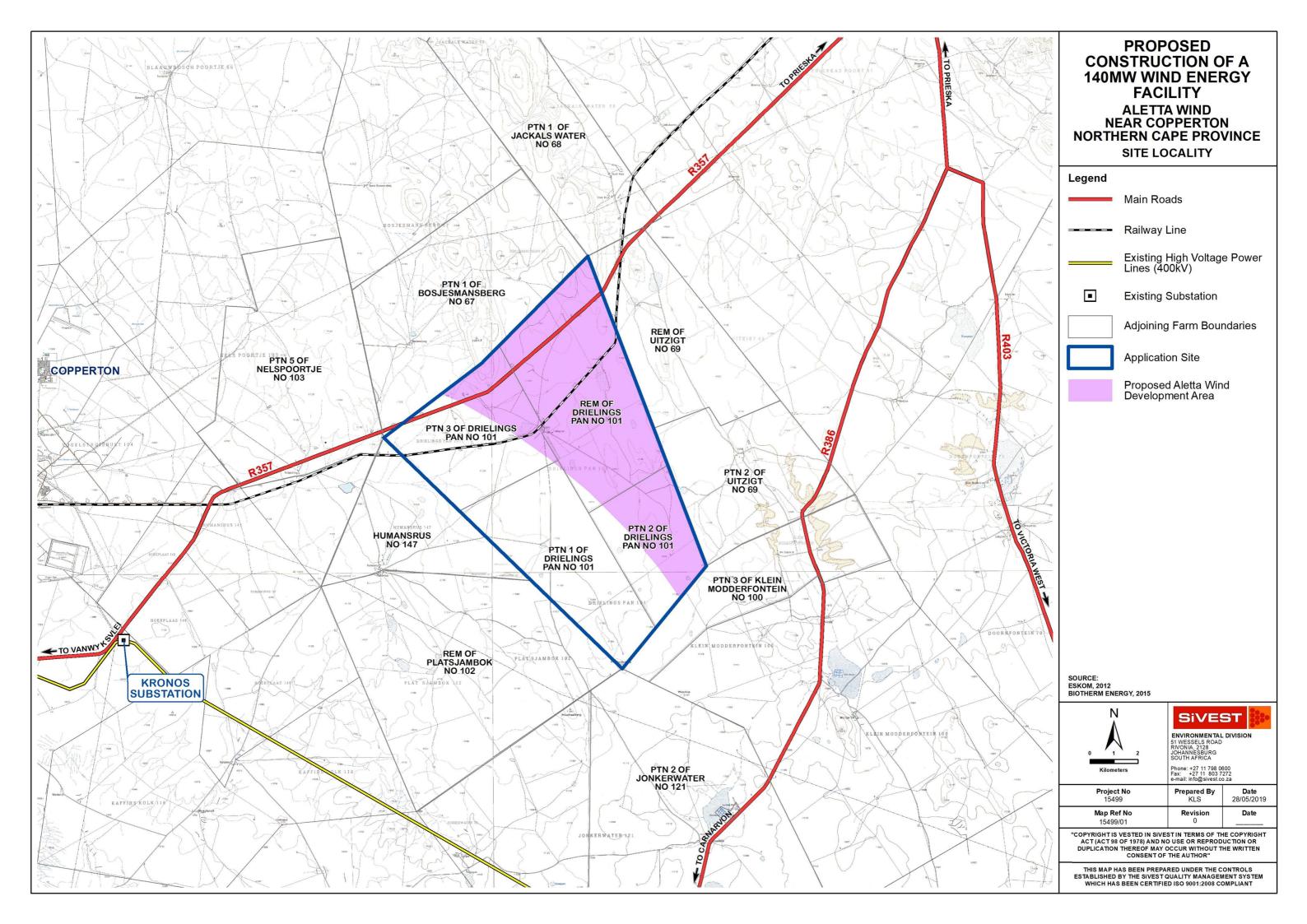
			100 AW 140/3000 CLASS IEC S TH1	20 AW 140/3465 CLASS IEC S T
ROTOR	number of blades Grantation	1	1	it and
	Diameter	tipe or	up-ind	140 m
	Swept area	1,7305 m	their of	154 21 m
	National direction	Charles	Carteline	Clarinite
	nazational speed	touristie - K.J _ 15.6 rpm	turistis - 6.6 _ 13.3 rpm	TREE
	Hub height	100 is	DO W	130 m
	Power regulation	Full span blade pitch	Full span blade pacts	Full spain blade proch
	Overspeed control	Full span blade jotch	Full span blade pitch	Full spain blade proch
	Notor chaft tilt angle	P	y.	P
	Cone large	m.s ryt	M.S m/s	THE STATE OF THE S
	Core sage	-	-	
LADES	Pateral	cont.	CORE .	ges .
	Total length	61.2 m	(a, 7 m)	68.7 m
	weight range	15600 kg + 3% / blade	18500 kg + 3% / blade	THE
	PROTE	full span	Full span	Full opin
	ANYDOYSAMIC BYSHIP	Full feathwing	Full feathering	Full feathering.
US	mus type	Cast iron	Cast iron	Cast ion
	Protection	Specy	Spany	Spary
ITCH SYSTEM				
TICH STRIEM	Pech bearings	thrubble your four point contact bearing	beable row four point contact being	Couble row four point contact bearing
	Actuation	mydraulic.	*posuit	Hydrause
	Linkage Foliation	Through hydraulic cylinders Accumulators on hub	Through hydraulic cylinders Accumulators on hub	Through hydraulic cylinders Accumulators on hub
		Accompany on the	The same of the sa	The state of the s
RIVE TRAIN	Constan	3 stages, 2 planetary / 1 paralel	3 stages, 2 planetary / 1 pargiel	2 stages, 2 planetary / 1 parties
V.34.9.14.14.1	Georbax nominal power	EIDO KW	ation kill	MI NO
	Guartox ratio	1183 (50 Hz) / 11100 (60 Hz)	11168 (50 Hz) / 11134 (60 Hz)	TRD
	Input speed	Variable - 9.7 _ 15.6 (pm)	Variable - 6.6 _ 13.3 /pm	TRD
	Output speed	variable - 770 - 1300 (pin (50 Hz)	variable - 600 _ 1385 (pm (30 Hz)	TED
	28.20	Variable - 925 _ 1565 (pm (66 Hz)	Variable - R16 1600 ipm (60 H1)	TRD
	Lustication	Pressure and option with	Pressure and spison with	Pressure and spirch with
		of cooler / of State	oil coder / oil fitter	ot coder / oil filter
		E STATE OF THE STA		
IOTOR SHAFT	Тура	Harged foliate strat	Forged hallow chaft	Forged tollow shaft
	supporting.	2 bearings	2 bearings	2 searings
RIVETRAIN BEARINGS	k	C-10-14-14-14-14-14-14-14-14-14-14-14-14-14-	and the second references to	Control of the Control of the Control
HIVE I KALIN BEAKINGS	Type	Couble opherical rater bearings.	Double spherical roller bearings.	Couble opherical railer bearings.
ARKING BRAKE	Type	Single Citik	Single disk	Single dito
	Lacytes	reigh speed shaft:	reigh speed shaft	High speed stuff
AW SYSTEM	Type	Double row four point contact bearing	Double now four paret contact bearing	Coulde less four point contact bearing
	Minwill GASE	destinated.	outertal	eutyrtai
	Simolog goar / yao dawe press ratio	to.bu	in.ht	tit.hts
	Braking system	Hydraulic Calipers	Hydrautic Calipers	Hydroulic California
	The Store System	siectrical metogeans.	Electrical matergeans	Electrical motorgears
AW GEARS AND HOTORS	Type	Manetary 4-5 stages	Planetary 4-5 stages	Planetary 4-5 stages
	ema .	111490	111430	115430
	Yaw rate Motor types	a.bir rgun. Anynoronoux 4 pales	S.EH rpm @ 50 Hz / S.11 rpm @ 60 Hz Neyscronous 4 pales	Acytoranous 4 points
	voltage / Frequency	230/400 V - 50-66 Hs.	/30/400 V - 90-46 Hz.	230/400 V - 10-40 Hz.
	Power rating / Hator speed	2.3 kW	3 kW / 3490 rpm # 50 Hz	TRD
		22.511	2.5 km / 1740 spm @ 60 Hz	TRD
YDRAULIC POWER UNIT	Of pump capacity	NO Cream	HO L/Iren	NO UNIO
	Militar type	27 stg	IP KW	27 610
	votage/frequency	360 y / 56-60 Hz	380 V / 50-60 HI	380 V / 50-60 Hz
	Made accumulator	2 x 30 f	2 x 201	216 201
	Principal accumulation	201	201	361
			_	
ENERATOR	Type	6 poles, double feeding	6 poles, double heading	is point, double theiring
	Rated Power .	2050 kW	boso kw	3665 MW
	Degree of gratection	Pia	ir sa	P S4
	Frequency	50-60 HJ	50-60 Hz	50-60 Hz
	voltage	rated V	13000 V	13000 V
	Power factor (electricitated ester) Speed range	0.03 770 - 1300 rpm (50 Hz)	680 - 1365 (pm (50 Hz)	THE
	-	RUE - 1660 rpm (60 Hc)	816 - 1626 /pm (60 Hz)	TRD
		and a selection (see re)	and a september that sold	-
ONTROL SYSTEM	Power control	Conserver Control Unit	Converter Control Unit	Converser Control Unit
	MAKEN PROCHOUSE	Programmatie Logical Controller	Programmable Logical Controller	Programmable Lagical Controller
	Interface	Scate .	srada .	scats
	Power factor correction	Programmatic by software	Programmable by software	Programmable by eathweet
				The second second
OWER	Type	futural Concrete	Tubular concrete	Tubular concrete
	Tower height.	16 m	118.00	118 m
	Platerial	Part-tensioned pre-culture Concrete	Post-tensioned pre-caused concrete	Past-tensioned pre-casted concrete
	Accres to the tower	Dear with lock system	Door with lock system	Coor with look system
	Access to rescelle cable	Ladder or elleyator	Ladder or elevator	Ladder or elevator
	Weight	KOD T	13.7% T	1376 1
	Foundation connection	One stud room eytheaded	One stud raise embedded	One stud roces embedded
		in concrete	a consiste	in concrete
CONTRACTOR OF THE PARTY OF THE		-		
PERATING DATA	Cut-in wind speed	1 10/5	3 894	3 M/E
	Cut-out wind great	25 m/s	20 m/s	TRED
	tractical power	aces kw	aces kre	SHEE SAN
	Operation temperature range Survival temperature range	-10°C to +10°C -10°C to +10°C	-10°C to +40°C	-38°C (0 + 18°C)

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Appendix F MAPS







Appendix G PROJECT TEAM CV'S

Callie Fouché

24 May 2018

CONTACT DETAILS

Office Address: Contact Number: 012 8081730 (W)

Private Bag x13 082 5559551 (Cell)

Lynn East Pretoria

0039 Email Address: <u>callie@itc-services.com</u>

EMPLOYER DETAILS

Employer : ITC Services

Plot 44

Nieshout Street Kameeldrift-East

Position : Technical Director

PROFILE

I was born on the 3rd of January 1964 in Coligny, matriculated in 1981 from Hoërskool Dirkie Uys in Durban. I have completed National Service during 1982 and 1983 at 2 Special Service Battalion in Zeerust. Completed National Diploma T1 and T2 at Pretoria Technicon during 1984. I joined Armscor Quality engineering in 1985 and completed T3 and T4 in the period 1986 – 1987. In my term at Armscor, I worked in the EMC division from 1986 to 1989 under the supervision of Sarel van der Merwe. I have joined PMP Electronics R&D division beginning of 1989 and ITC Services as EMC Test Technician later that same year. I was promoted to Senior Test Engineer in 1994 and was appointed as Technical Director (current position) in 1997.

EDUCATION

Qualification	Topic	Education Institute	Duration
National Higher Diploma Electrical Engineering	Electronics and electrical engineering.	Pretoria Technicon	1984 - 1987
Electrician	Electrical	Services sector education and training authority	30/07/2012

SHORT COURSE ATTENDANCE

Some courses attended that are considered relevant in this context, include:

Continuing Engineering Education and Short Courses	Presented by	Date
Quality A	Armscor	1985
Practical EMI Fixes	Violette Engineering	1989
RF Metrology	Technicon Pretoria	1992
EMC Management and Design for a Project	ICT	1994
EMC Testing	ERA	1995
EMC In Telecommunications	Parker EMC engineering and ITC Services	1996
Electrical Earth Design and Earth Measurements	Exoweld	1997
Lightning Protection and Earthing of Electronic Systems	Wits University	1998
EMC and Cosmic Radiation	SAAB Avionics (Sweden)	2002
Technical Assessor Course	SANAS	2014

PROFESSIONAL STATUS

Professional Body	Nature of Involvement	Duration
IEC Technical Committee for EMC	Member of the IEC TC73	1992 – present.
EMC Specialist Technical Committee	Member SANAS STC	2002 – present.
IEC Technical Committee TC106	Mirror committee chairman	2010 - present
SANAS	Technical Assessor	2014 - present

WORK EXPERIENCE

Position held and Department	Duration	Primary Responsibilities	Major Achievements
Armscor Quality Engineering Technician in Training – Electrical Division.	Jan 1984 to Dec 1985	Testing of various military equipment against electrical and environmental specifications	Successful completed T1 and T2
Armscor Quality Engineering Test Technician - EMC Division	Jan 1986 to Jun 1989	EMC testing of military equipment and interpretation of results under the supervision of Sarel van der Merwe	Successful completed T3 and T4
PMP Electronics R&D division Technician	June 1989 to Aug 1989	Member of development of the intelligent ammunition project team	•
ITC Services Test Technician	Sept 1989 to Nov 1994	Establish and expand the EMC test laboratory and perform EMC testing of military and commercial equipment, interpretation of results and consult clients on corrective actions under the supervision of Sarel van der Merwe	Successful completion of several projects.
ITC Services Senior Test Engineer	Dec 1994 to Nov 1997	EMC Field Testing, Interference problem investigations. Consulting and Theoretical EMC analysis of equipment and facility performance.	 Investigations into plant interference and problem solving for Ashanti Goldfields in Ghana Designed the power line filters used by SAAF in the SAAF HQ Integrated COMSEC automated Tests system for SACSA
ITC Services Technical Director	Dec 1997 to present.	EMC Field Testing, Interference problem investigations. Consulting and Theoretical EMC analysis of equipment and facility performance. Design and compilation of EMC Control plans. Power quality investigations Shielded enclosure design	 Design quality plan and achieve ISO/IEC 17025 for the laboratory Power analysis and implementation of corrective actions for Siemens and Vodacom in African countries Power filter design and manage manufacturing for UAV program. Responsible for EMC management for the Euro fighter helmet tracker system. (EMC Control Plan, EMC Design Reviews, EMC Test Plan) Successful completion of Nuclear hardening of the Euro fighter helmet tracker system in Germany

	 Designed magnetic shielding for export military vehicle project. Manage the shielding manufacturing
	C-band satellite earth station interference evaluations
	 EMC Consultant for multinational vehicle project
	 Shielded enclosure design - SKA trailers
	 EMC Design guidance for periscope development.
	 Manage KAPB shielded room installation and perform SE Tests
	 Consultation on renewable energy projects and their impact on SKA
	 Perform path loss tests for windfarm projects in the Northern Cape
	 Perform maintenance activities on the shielded enclosures at the KAPB.
	 Presented a paper at the IEEE Conference 2014.
	 Assist with the compilation of a RF Guidance document for the Department of Labour to assist with the risk assessment of RF in the danger areas of explosives facilities.
	 Presented papers at several NIXT and Explosives Managers Conferences



Andrea Gibb

Name Andrea Gibb

Profession Environmental Practitioner

Name of Firm SiVEST SA (Pty) Ltd

Present Appointment Divisional Manager

Environmental Division

Years with Firm 8 Years

Date of Birth 29 January 1985

ID Number 8501290020089

Nationality South African

Education

Matriculated 2003, Full Academic Colours, Northcliff High School, Johannesburg, South Africa

Professional Qualifications

BSc (Hons) Environmental Management (University of South Africa 2008-2010)

BSc Landscape Architecture (with distinction) (University of Pretoria 2004-2007)

<u>Awards:</u> Cave Klapwijk prize for highest average in all modules in the Landscape Architecture programme, ILASA book prize for the best Landscape Architecture student in third year design, Johan Barnard planting design prize for the highest distinction average in any module of plant science.

ArcGIS Desktop 1 (ESRI South Africa December 2010)

Environmental Impact Assessment (EIA) 2014 Legal Regime Workshop (Imbewu 2015)

Employment Record

Sept 2018 – to date	SiVEST SA (Pty) Ltd: Divisional Manager: Environmental Division
May 2017 – Aug 2018	SiVEST SA (Pty) Ltd: Senior Manager: Environmental Division

Aug 2010 – Apr 2017 SiVEST SA (Pty) Ltd: Environmental Practitioner

Jan 2008 – July 2010 Cave Klapwijk and Associates: Environmental Assistant and

Landscape Architectural Technologist

Feb 2006 – Dec 2006 Cave Klapwijk and Associates: Part time student

Language Proficiency

LANGUAGE	SPEAK	READ	WRITE
English	Fluent	Fluent	Fluent





Andrea Gibb

Key Experience

Andrea has over 10 years' work experience and is employed by SiVEST's Environmental Division as the Divisional Manager heading up the Renewable Energy Sector in the Johannesburg Office. She specialises in overseeing large scale multifaceted Environmental Impact Assessments (EIAs) and Basic Assessments (BAs) throughout South Africa, undertaken according to International Finance Corporation (IFC) standards and Equator Principles, within the renewable energy generation and electrical distribution sectors. From a business development perspective Andrea assists the division by marketing the environmental services and identifying prospective clients. She enjoys guiding, mentoring and motivating the team to find their niche and improve their input. Andrea further specialises in visual impact assessments (VIAs) and has developed a specialist team who she oversees.

Skills include:

- Project and team management
- Marketing and business development
- Financial management
- Client liaison and relationship management
- Team leadership
- Mentorship and training
- Report writing and review
- Documentation / quality control

Projects Experience

Aug 2010 - to date

ENVIRONMENTAL IMPACT ASSESSMENT (EIA) / BASIC ASSESSMENT (BA)

- BA for the proposed construction of the Grasskoppies Substations and Power Line near Loeriesfontein, Northern Cape Province.
- BA for the proposed construction of the Ithemba Substations and Power Line near Loeriesfontein, Northern Cape Province.
- BA for the proposed construction of the Hartebeest Leegte Substations and Power Line near Loeriesfontein, Northern Cape Province.
- BA for the proposed construction of the !Xha Boom Substations and Power Line near Loeriesfontein, Northern Cape Province.
- EIA for the proposed construction of the Grasskoppies Wind Farm near Loeriesfontein, Northern Cape Province.
- EIA for the proposed construction of the Ithemba Wind Farm near Loeriesfontein, Northern Cape Province.
- EIA for the proposed construction of the Hartebeest Leegte Wind Farm near Loeriesfontein, Northern Cape Province.
- EIA for the proposed construction of the !Xha Boom Wind Farm near Loeriesfontein, Northern Cape Province.
- Application for an Amendment of the Environmental Authorisation (EA) for the proposed construction of the Droogfontein II PV Plant near Kimberley, Northern Cape Province.
- Amendment and Resubmission of the FBAR for the Eskom Longdown Substation and Vyeboom 66kV Turn-in Power Lines near Villiersdorp, Western Cape Province.
- BA for the proposed construction of the Leeuwbosch Power Plant near Leeudoringstad, North West Province.



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- BA for the proposed construction of the Wildebeestkuil Power Plant near Leeudoringstad, North West Province.
- EIA for the proposed development of the Tlisitseng 1 and 2 75MW Solar Photovoltaic (PV)
 Energy Facilities near Lichtenburg, North West Province.
- EIAs for the proposed development of the Sendawo 1, 2, and 3 75MW Solar PV Energy Facilities near Vryburg, North West Province.
- EIA for the proposed construction of the Sendawo Common Collector Substation and power line near Vryburg, North West Province.
- EIA for the proposed construction of the Aletta 140MW Wind Energy Facility near Copperton, Northern Cape Province.
- Application for an Amendment of the Environmental Authorisation (EA) for the proposed construction of the 100MW Limestone Solar Thermal Power Project near Danielskuil, Northern Cape Province.
- Applications for the Amendment of the EAs for the proposed construction of three 75MW solar PV facilities near Prieska, Northern Cape Province.
- Applications for the Amendment of the EAs for the proposed construction of the 75MW Arriesfontein and Wilger Solar Power Plants near Danielskuil, Northern Cape Province.
- Completion and submission of the final EIA report for the proposed Rooipunt PV Solar Power Park Phase 1 and proposed Rooipunt PV Solar Power Park Phase 2 near Upington, Northern Cape Province.
- EIAs for the proposed construction of the Helena 1, 2 and 3 75MW Solar PV Energy Facilities near Copperton. Northern Cape Province.
- EIA for the proposed construction of the Nokukhanya 75MW Solar PV Power Plant near Dennilton, Limpopo Province.
- EIA for the proposed development of the Dwarsrug Wind Farm near Loeriesfontein, Northern Cape Province.
- BA for the proposed construction of two 132kV power lines and associated infrastructure from the Redstone Solar Thermal Power Project site to the Olien MTS near Lime Acres, Northern Cape Province.
- BA for the proposed construction of two 132kV power lines and associated infrastructure from Silverstreams DS to the Olien MTS near Lime Acres, Northern Cape Province.
- BA for the proposed Construction of the SSS1 5MW Solar PV Plant on the Western Part of Portion 6 (Portion of Portion 5) of Farm Spes Bona 2355 near Bloemfontein, Free State
- BA for the proposed Construction of the SSS2 5MW Solar PV Plant on the Eastern Part of Portion 6 (Portion of Portion 5) of Farm Spes Bona 2355 near Bloemfontein, Free State Province.
- BA for the proposed Mookodi Integration Phase 2: Proposed Construction of a 132kV power line from the proposed Bophirima Substation to the existing Schweizer-Reneke Substation, North West Province.
- BA for the proposed Mookodi Integration Phase 2: Proposed Construction of a 132kV power line from the Mookodi Substation to the existing Magopela Substation, North West Province.
- BA for the proposed Mookodi Integration Phase 2: Proposed Construction of the Mookodi Ganyesa 132kV power line, proposed Ganyesa Substation and Havelock LILO, North West Province.
- Amendment of the Final Environmental Impact Report for the Proposed Mookodi 1 Integration Project near Vryburg, North West Province.
- BA for the proposed 132kV power line and associated infrastructure for the proposed Redstone Solar Thermal Energy Plant near Lime Acres, Northern Cape Province.
- BA for the proposed construction of a 132kV power line and substation associated with the 75MW PV Plant on the Farm Droogfontein (PV 3) in Kimberley, Northern Cape Province.
- BA for the proposed establishment of a Learning and Development Retreat and an Executive Staff and Client Lodge at Mogale's Gate, Gauteng Province.
- Application for an Amendment of the EA to increase the output of the proposed 40MW PV Facility on the farm Mierdam to 75MW, Northern Cape Province.



Andrea Gibb

- BA for the proposed construction of a power line and substation near Postmasburg, Northern Cape Province.
- BA for the proposed West Rand Strengthening Project 400kV double circuit power line and substation extension in the West Rand, Gauteng.
- EIA for the proposed construction of a wind farm and PV plant near Prieska, Northern Cape Province.
- Public Participation assistance as part of the EIA for the proposed Thyspunt Transmission Lines Integration Project – EIA for the proposed construction of 5 x 400kV transmission power lines between Thyspunt to Port Elizabeth, Eastern Cape Province.
- EIA assistance for the proposed construction of three Solar Power Plants in the Northern Cape Province.
- Public Participation as part of the EIA for the proposed Delareyille Kopela Power Line and Substation, North West Province.
- Public Participation as part of the EIA for the Middelburg Water Reclamation Project, Mpumalanga Province.

VISUAL IMPACT ASSESSMENT (VIA)

- VIA for the proposed construction of the Mlonzi Golf Estate and Hotel Development, Eastern Cape Province.
- VIA for the proposed Tinley Manor South Banks Beach Enhancement Solution, KwaZulu-Natal Province.
- VIA for the proposed construction of the Grasskoppies Wind Farm near Loeriesfontein, Northern Cape Province.
- VIA for the proposed construction of the Ithemba Wind Farm near Loeriesfontein, Northern Cape Province.
- VIA for the proposed construction of the Hartebeest Leegte Wind Farm near Loeriesfontein, Northern Cape Province.
- VIA for the proposed construction of the !Xha Boom Wind Farm near Loeriesfontein, Northern Cape Province.
- VIA for the proposed Phezukomoya Wind Energy Facility near Noupoort, Northern Cape Province.
- VIA for the proposed San Kraal Wind Energy Facility near Noupoort, Northern Cape Province
- VIA for the proposed Assagay Valley Mixed Use Development, KwaZulu-Natal Province.
- VIA for the proposed Kassier Road North Mixed Use Development, KwaZulu-Natal Province.
- VIA for the proposed construction of a power line and associated infrastructure for the proposed Kalkaar Solar Thermal Power Plant near Kimberley, Free State and Northern Cape Provinces.
- VIA (Scoping Phase) for the proposed construction of a 3000MW Wind Farm and associated infrastructure near Richmond, Northern Cape Province.
- VIA for the proposed construction of the Aletta 140MW Wind Energy Facility near Copperton, Northern Cape Province.
- VIA for the proposed construction of a power line and associated infrastructure for the proposed Rooipunt Solar Thermal Power Plant near Upington, Northern Cape Province.
- VIAs (Impact Phase) for the proposed construction of the Sendawo 1, 2 and 3 solar PV energy facilities near Vryburg, North West Province.
- VIA (Impact Phase) for the proposed construction of the Sendawo substation and associated power line near Vryburg, North West Province.
- VIAs (Impact Phase) for the proposed construction of the Tlisitseng 1 and 2 solar PV energy facilities near Lichtenburg, North West Province.
- VIA for the proposed construction of the Tlisitseng substation and associated 132kV power line near Lichtenburg, North West Province.
- VIA (Scoping Phase) for the proposed construction of the Sendawo substation and associated power line near Vryburg, North West Province.
- VIA (Scoping Phase) for the proposed construction of the Sendawo 1, 2 and 3 solar PV energy facilities near Vryburg, North West Province.



Andrea Gibb

- VIA (Scoping Phase) for the proposed construction of the Tlisitseng 1 and 2 solar PV energy facilities near Lichtenburg, North West Province.
- Visual recommendations for Phase 1 of the proposed Renishaw Estate Mixed Use Development, KwaZulu-Natal Province.
- VIA for the proposed Tinley Manor South Banks Development, KwaZulu-Natal Province.
- VIAs (Impact Phase) for the proposed construction of the Helena 1, 2 and 3 75MW Solar PV Energy Facilities near Copperton, Northern Cape Province.
- VIA (Scoping Phase) for the proposed construction of the Helena 1, 2 and 3 75MW Solar PV Energy Facilities near Copperton, Northern Cape Province.
- Visual Due Diligence Report for the possible rapid rail extensions to the Gauteng network, Gauteng Province.
- Visual Status Quo and Constraints Report for the possible rapid rail extensions to the Gauteng network, Gauteng Province.
- VIA for the proposed agricultural components of the Integrated Sugar Project in Nsoko, Swaziland.
- VIA for the proposed Tweespruit to Welroux power lines and substation, Free State Province.
- VIA for the proposed construction of the Nokukhanya 75MW Solar PV Power Plant near Dennilton, Limpopo Province.
- VIA (Impact Phase) for the proposed development of the Dwarsrug Wind Farm near Loeriesfontein, Northern Cape Province.
- VIA for the proposed amendment to the authorised power line route from Hera Substation to Westgate Substation, Gauteng Province.
- VIA (Impact Phase) for the Eastside Junction Mixed Use Development near Delmas, Mpumalanga Province.
- VIA for the proposed construction of two 132kV power lines and associated infrastructure from the Redstone Solar Thermal Power Project site to the Olien MTS near Lime Acres, Northern Cape Province.
- VIA for the proposed construction of two 132kV power lines and associated infrastructure from Silverstreams DS to the Olien MTS near Lime Acres, Northern Cape Province.
- VIA (Scoping Phase) for the proposed development of the Dwarsrug Wind Farm near Loeriesfontein, Northern Cape Province.
- VIA for the proposed Rorqual Estate Development near Park Rynie on the South Coast of KwaZulu Natal.
- VIA (Scoping Phase) for the proposed construction of a Coal-fired Power Station, Coal Mine and Associated Infrastructure near Colenso, KwaZulu-Natal Province.
- VIA for the proposed Mookodi Integration Phase 2: Proposed Construction of the Mookodi -Ganyesa 132kV power line, proposed Ganyesa Substation and Havelock LILO, North West Province.
- VIA for the proposed construction of the Duma transmission substation and associated Eskom power lines, KwaZulu-Natal Province.
- VIA for the proposed construction of the Madlanzini transmission substation and associated Eskom power lines, Mpumalanga Province.
- VIA for the proposed rebuild of the 88kV power line from Normandie substation to Hlungwane substation, Mpumalanga and KwaZulu-Natal Provinces.
- VIA for the proposed construction of the Nzalo transmission substation and associated Eskom power lines, KwaZulu-Natal Province.
- VIA for the proposed construction of the Sheepmoor traction substation with two 20MVA transformer bays and a new associated 88kV turn-in power line, Mpumalanga Province.
- VIA for the proposed rebuild of the 88kV power line from Uitkoms substation to Antra T-off, Mpumalanga Province.
- VİA for the proposed rebuild of the 88kV power line from Umfolozi substation to Eqwasha traction substation including an 88kV turn-in power line to Dabula traction substation, Kwazulu-Natal Province.
- VIA for the proposed construction of the new 88/25kV Vryheid traction substation with two 20MVA transforma bays and a new associated 88kV turn-in power line, KwaZulu-Natal Province.



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- VIA for the proposed construction of a 132kV power line and substation associated with the 75MW PV Plant on the Farm Droogfontein (PV 3) in Kimberley, Northern Cape Province.
- VIA (Impact Phase) for the proposed Construction of a Solar PV Power Plant near De Aar, Northern Cape Province.
- VIA for the (Impact Phase) proposed Construction of the Renosterberg Wind Farm near De Aar, Northern Cape Province.
- VIA for the (Impact Phase) proposed Construction of the Renosterberg Solar PV Power Plant near De Aar, Northern Cape Province.
- VIA for the proposed construction of a 132kV power line for the Redstone Thermal Energy Plant near Lime Acres, Northern Cape Province.
- VIA for the proposed Mookodi Integration phase 2 132kV power lines and Ganyesa substation near Vryburg, North West Province.
- VIA for the proposed 132kV power lines associated with the PV Plants on Droogfontein Farm near Kimberley, Northern Cape Province.
- VIA (Scoping phase) for the Eastside Junction Mixed Use Development near Delmas, Mpumalanga Province.
- VIA for the proposed development of a learning and development retreat and an executive and staff lodge at Mogale's Gate, Gauteng Province.
- VIA for the proposed construction of a substation and 88kV power line between Heilbron (via Frankfort) and Villiers, Free State Province.
- Visual Status Quo Assessment for the Moloto Development Corridor Feasibility Study in the Gauteng Province, Limpopo Province and Mpumalanga Province.
- VIA the West Rand Strengthening Project 400kV double circuit power line and substation extension in the West Rand, Gauteng.
- VIA for the proposed construction of a wind farm and solar photovoltaic plant near Loeriesfontein, Northern Cape Province.
- Visual sensitivity mapping exercise for the proposed Mogale's Gate Expansion, Gauteng.
- VIA (Scoping Phase) for the proposed Renosterberg Solar PV Power Plant and Wind Farm near De Aar, Northern Cape Province.
- Scoping level VIAs for the proposed construction of three Solar Power Plants in the Northern Cape Province.
- VIAs for the Spoornet Coallink Powerline Projects in KZN and Mpumalanga.
- Visual Constraints Analysis for the proposed establishment of four Wind Farms in the Eastern and Northern Cape Province.
- VIA (Scoping Phase) for the proposed development of a solar energy facility in De Aar, Northern Cape.
- VIA (Scoping Phase) for the proposed development of a solar energy facility in Kimberley, Northern Cape.

STRATEGIC ENVIRONMENTAL PLANNING

- Assistance with the Draft Environmental Management Framework for the Mogale City Local Municipality, Gauteng Province.
- Sensitivity Negative Mapping Analysis for the proposed Mogale's Gate Development, Gauteng Province.



Name Stephan Hendrik Jacobs

Profession Environmentalist

Name of Firm SiVEST SA (Pty) Ltd

Present Appointment Environmental Consultant

Years with Firm 3 years

Date of Birth 28 May 1991

ID Number 9105285065080

Nationality South African

Education

Pretoria Boys High, Pretoria, South Africa, Matriculated 2009.

Professional Qualification

 B.Sc. Hons Environmental Management and Analysis, (Post Graduate) University Of Pretoria Honours (2014).

B.Sc. Environmental Sciences (Undergraduate) University Of Pretoria (2012-2013)

Employment Record

May 2015 – current SiVEST SA (Pty) Ltd – Graduate Environmental Consultant

Nov 2014 – Feb 2015 Sodwana Bay Fishing Charters – Assistant Manager

Oct 2014 – Mar 2015 Ufudu Turtle Tours – Tour Guide

Language Proficiency

LANGUAGE	SPEAK	READ	WRITE
English	Excellent	Excellent	Excellent
Afrikaans	Good	Good	Good

Key Experience

Stephan joined SiVEST in May 2015 and holds the position of Environmental Consultant in the Johannesburg office.

Stephan specialises in the field of Environmental Management and has been extensively involved in Environmental Impact Assessment (EIA) and Basic Assessment (BA) processes for various types of projects / developments. As such, Stephan has vast experience with regards to the compilation of Environmental Impact Assessments (EIAs) and Basic Assessments (BAs). Additionally, Stephan has extensive experience in undertaking public participation and stakeholder engagement processes. Stephan has also assisted extensively in the undertaking of field work and the compilation of reports for specialist studies such as Surface Water and Visual Impact Assessments. Stephan also has experience in Environmental Compliance and Auditing and has acted as an Environmental Control Officer (ECO) for several infrastructure projects.

Stephan has been educated and achieved his degrees (B.Sc. and B.Sc. Hons) at the University of Pretoria in Environmental Sciences (Environmental Management & Analysis).





Skills include:

- Strong computer skills (Work, excel, PowerPoint etc.);
- Strong Proposal and report writing skills;
- Report compilation skills for Environmental Impact Assessments (EIAs) and Basic Assessments (BAs);
- Report compilation skills for Environmental Management Plans/Programmes (EMPr);
- Compilation and conducting Visual Impact Assessments;
- Assisting in Surface Water / Wetland Delineations and Assessments.

Key experience includes:

- Environmental Impact Assessment (EIA) of small, medium and large-scale infrastructure projects,
- Basic Assessment (BA), of small, medium and large-scale infrastructure projects,
- Environmental Management Plans (EMPr), of small, medium and large-scale infrastructure projects,
- Undertaking of Public Participation and Stakeholder Engagement Processes
- Proposal and tender compilation,
- Environmental Compliance and Auditing (ECO);
- Various site inspections, and
- Visual Impact Assessments (Field work and report compilation).

Projects Experience

Stephan is responsible for the following activities: report writing, proposal writing, assisting in specialist surface water delineation and functional assessments, assisting in visual impact assessments and environmental compliance and auditing procedures. Current and completed projects / activities are outlined in detail below:

- Environmental Control Officer (ECO) for the Polokwane Integrated Rapid Public Transport System (IRPTS), Limpopo Province.
- Basic Assessment (BA) for the construction of a Non-Motorised Transport (NMT) Training and Recreational Park adjacent to the Peter Mokaba Stadium in Polokwane, Limpopo Province.
- Basic Assessment (BA) for the Proposed Expansion of the Tissue Manufacturing Capacity at the Twinsaver Kliprivier Operations Base, Gauteng Province.
- Basic Assessment (BA) for the Proposed Construction of a New SPAR Distribution Centre on Erf 1092 at Redhouse in Port Elizabeth, Eastern Cape Province.
- Basic Assessment (BA) for the Proposed Construction of the Graskoppies Substation, Linking Substation and Associated 132kV Power Line near Loeriesfontein, Northern Cape Province.
- Basic Assessment (BA) for the Proposed Construction of the Hartebeest Leegte Substation, Linking Substation and Associated 132kV Power Line near Loeriesfontein, Northern Cape Province.
- Basic Assessment (BA) for the Proposed Construction of the Ithemba Substation, Linking Substation and Associated 132kV Power Line near Loeriesfontein, Northern Cape Province.
- Basic Assessment (BA) for the Proposed Construction of the !Xha Boom Substation, Linking Substation and Associated 132kV Power Line near Loeriesfontein, Northern Cape Province
- Environmental Impact Assessment (EIA) for the Proposed Construction of the Graskoppies
 Wind Farm near Loeriefontein, Northern Cape Province.



- Environmental Impact Assessment (EIA) for the Proposed Construction of the Hartebeest Leegte Wind Farm near Loeriefontein, Northern Cape Province.
- Environmental Impact Assessment (EIA) for the Proposed Construction of the Ithemba Wind Farm near Loeriefontein, Northern Cape Province.
- Environmental Impact Assessment (EIA) for the Proposed Construction of the !Xha Boom Wind Farm near Loeriefontein, Northern Cape Province.
- Environmental Control Officer (ECO) for Phase 1 and Phase 2 of the Newmarket Retail Development, Gauteng Province.
- Environmental Control Officer (ECO) for the proposed NuPay Office Block development at the Newmarket Retail Development, Gauteng Province.
- Environmental Control Officer (ECO) for the proposed Construction of the Decathlon Building at the Newmarket Retail Development, Gauteng Province.
- Environmental Control Officer (ECO) for the External Road Upgrades at the Newmarket Retail Development, Gauteng Province.
- Environmental Review of the Xakwa Coal Operations, adjacent to the proposed Eastside Junction Development.
- Environmental Due Diligence for the Woodlands and Harrowdene Office Parks in Woodmead, Gauteng Province.
- Visual Impact Assessment for the Helena Solar PV Plant, Northern Cape Province.
- Visual Impact Assessment for the Nsoko Msele Integrated Sugar Project, Swaziland.
- Visual Impact Assessments for the proposed construction of the Sendawo Solar 1, Sendawo Solar 2 and Sendawo Solar 3 Photovoltaic (PV) Energy Facilities near Vryburg, North West Province.
- Visual Impact Assessments for the proposed construction of the Sendawo Substation and Associated 400kV Power Line near Vryburg, North West Province.
- Visual Impact Assessments for the proposed construction of the Tlisitseng Solar 1 and Tlisitseng Solar 2 Photovoltaic (PV) Energy Facilities near Lichtenburg, North West Province.
- Visual Impact Assessment for the proposed construction of the Tlisitseng 1 132kV Substation and associated 132kV Power Line near Lichtenburg, North West Province.
- Visual Impact Assessment for the proposed construction of the Tlisitseng 2 132kV Substation and associated 132kV Power Line near Lichtenburg, North West Province.
- Visual Impact Assessment for the proposed construction of the 3000MW PhilCo Green Energy Wind Farm and Associated Infrastructure near Richmond, Northern Cape Province.
- Visual Impact Assessment for the proposed construction of the Aletta 140MW Wind Energy Facility neat Copperton, Northern Cape Province.
- Visual Impact Assessment for the proposed construction of the Aletta 132kV Substation and associated 132kV Power Line near Copperton, Northern Cape Province.



- Visual Impact Assessment for the proposed construction of the Eureka 140MW Wind Energy Facility and associated Infrastructure near Copperton, Northern Cape Province.
- Visual Impact Assessment for the proposed construction of the Eureka 400kV Substation and 400kV Power Line neat Copperton, Northern Cape Province.
- Visual Impact Assessment for the Proposed Construction of the Graskoppies Wind Farm near Loeriesfontein, Northern Cape Province.
- Basic Visual Impact Assessment for the Proposed Construction of the Graskoppies Substation, Linking Substation and Associated 132kV Power Line near Loeriesfontein, Northern Cape Province.
- Visual Impact Assessment for the Proposed Construction of the Hartebeest Leegte Wind Farm near Loeriesfontein, Northern Cape Province.
- Basic Visual Impact Assessment for the Proposed Construction of the Hartebeest Leegte Substation, Linking Substation and Associated 132kV Power Line near Loeriesfontein, Northern Cape Province.
- Visual Impact Assessment for the Proposed Construction of the Ithemba Wind Farm near Loeriesfontein, Northern Cape Province.
- Basic Visual Impact Assessment for the Proposed Construction of the Ithemba Substation, Linking Substation and Associated 132kV Power Line near Loeriesfontein, Northern Cape Province.
- Visual Impact Assessment for the Proposed Construction of the !Xha Boom Wind Farm near Loeriesfontein, Northern Cape Province.
- Basic Visual Impact Assessment for the Proposed Construction of the !Xha Boom Substation, Linking Substation and Associated 132kV Power Line near Loeriesfontein, Northern Cape Province.
- Visual Impact Assessment for the Proposed Construction of the 315MW Phezukomoya Wind Energy Facility near Noupoort, Northern Cape Province.
- Visual Impact Assessment for the Proposed Construction of the 390MW Sankraal Wind Energy Facility near Noupoort, Northern Cape Province.
- Visual Impact Assessment for the proposed development of the Phase 1 Kuruman Wind Energy Facility, Kuruman, Northern Cape Province
- Visual Impact Assessment for the proposed development of the Phase 2 Kuruman Wind Energy Facility, Kuruman, Northern Cape Province
- Basic Visual Impact Assessment for the proposed development of Supporting Electrical Infrastructure to the Phase 1 and Phase 2 Kuruman Wind Energy Facilities, Kuruman, Northern Cape Province
- Visual Impact Assessment for the Proposed Tinley Manor South Banks Beach Enhancement Solution, KwaZulu-Natal Province.
- Visual Impact Assessment for the proposed Mlonzi Hotel and Golf Estate Development, Near Lusikisiki, Eastern Cape Province



- Visual Impact Assessment for the Proposed Assagay Valley Development, KwaZulu-Natal Province.
- Visual Impact Assessment for the Proposed Kassier Road North Development, KwaZulu-Natal Province.
- Basic Visual Impact Assessment for the proposed construction of up to a 132kV Power Line and Associated Infrastructure for the Rooipunt Solar Thermal Power Plant near Upington, Northern Cape Province.
- Basic Visual Impact Assessment for the proposed construction of up to a 132kV Power Line and Associated Infrastructure for the proposed Kalkaar Solar Thermal Power Plant near Kimberly, Free State and Northern Cape Provinces.
- Surface Water Assessment for the Steve Thswete Local Municipality, Mpumalanga Province.
- Surface Water Delineation and Assessment for the proposed coal Railway Siding at the Welgedacht Marshalling Yard and associated Milner Road Upgrade near Springs, Ekurhuleni Metropolitan Municipality.



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Name Hlengiwe Innocentia Ntuli

Profession PPP Support and Administrator

Name of Firm SiVEST SA (PTY) LTD

Present Appointment Projects Secretary /

Support and PPP Administrator

Years with Firm 6 Years

Date of Birth 27 September 1989

ID Number 890927 02300 83

Nationality South African

Education

Minerva High School (2002 - 2006) College Campus (2007-2009)

Professional Qualifications

Certificate in Contact Centre Support NQF2 (2010) Diploma in IT Programming (2007 – 2009)

Employment Record

Jun 2012 – to date SiVEST SA (Pty) Ltd: Divisional Secretary / PPP Support and Administratore

May 2009 - May 2012 DSG (PTY) LTD: Contact Centre Agent

Language Proficiency

LANGUAGE	SPEAK	READ	WRITE
IsiZulu	Fluent	Fluent	Fluent
English	Fluent	Fluent	Fluent

Key Experience

Hlengiwe joined SiVEST in 2012 and holds the position of Projects Secretary in the Johannesburg Office of SiVEST and assists in the general day to day administration of the organisation.

She has taken on the role of public participation process administrator which includes maintaining project database, arranging and coordinating public meetings as well as following up with organs of states to get comments on projects.

Administrative Experience

Administrative responsibilities include:

- PPP Administration and use of Maximiser
- Filing electronically and paper copies
- Faxing, scanning, emailing, phoning, printing and typing
- Collecting of HR documents (timesheets, leave forms, expense, travel)
- · Reception and switchboard reliever
- Document distribution





- Travel arrangements
- · Purchasing and outsourcing

Project Experience

- Public Participation Process for the Proposed Construction of the Graskoppies On-site Eskom Substation, Linking Substation and Associated 132kV Power Line near Loeriesfontein, Northern Cape Province.
- Public Participation Process for the Proposed Construction of the Hartebeest Leegte On-site Eskom Substation, Linking Substation and Associated 132kV Power Line near Loeriesfontein, Northern Cape Province.
- Public Participation Process for the Proposed Construction of the Ithemba On-site Eskom Substation, Linking Substation and Associated 132kV Power Line near Loeriesfontein, Northern Cape Province.
- Public Participation Process for the Proposed Construction of the !Xha Boom On-site Eskom Substation, Linking Substation and Associated 132kV Power Line near Loeriesfontein, Northern Cape Province.
- Public Participation Process for the Proposed Refurbishment of the Swartberg Repeater Road near Ladysmith, Western Cape Province
- Basic Assessment (BA) for Proposed Refurbishment of the Swartberg Repeater Road near Ladysmith, Western Cape Province



Kerry Lianne Schwartz

Name Kerry Lianne Schwartz

Profession GIS Specialist

Name of Firm SiVEST SA (Pty) Ltd

Present Appointment Senior GIS Consultant:

Environmental Division

Years with Firm 30 Years

Date of Birth 21 October 1960

ID No. 6010210231083

Nationality South African



BA (Geography), University of Leeds 1982

Membership to Professional Societies

South African Geomatics Council - GTc GISc 1187

Employment Record

1994 – Present
 1988 - 1994
 1984 – 1988
 1984 – 1988
 1988 - 1994
 1984 – 1988
 SiVEST (formerly Scott Wilson Kirkpatrick): Town Planning Technician.
 Development and Services Board, Pietermaritzburg: Town Planning Technician.

Language Proficiency

LANGUAGE	SPEAK	READ	WRITE
English	Fluent	Fluent	Fluent

Key Experience

Kerry is a GIS specialist with more than 20 years' experience in the application of GIS technology in various environmental, regional planning and infrastructural projects undertaken by SiVEST.

Kerry's GIS skills have been extensively utilised in projects throughout South Africa in other Southern African Countries. These projects have involved a range of GIS work, including:

- Design, compilation and management of a demographic, socio-economic, land use, environmental and infrastructural databases.
- Collection, collation and integration of data from a variety of sources for use on specific projects.
- Manipulation and interpretation of both spatial and alphanumeric data to provide meaningful inputs for a variety of projects.
- Production of thematic maps and graphics.
- Spatial analysis and 3D modelling, including visual and landscape assessments.





Projects Experience

STRATEGIC PLANNING PROJECTS

Provision of database, analysis and GIS mapping support for the following:

- Water Plan 2025: Socio-economic, Land Use and Demographic Update Umgeni Water (KwaZulu-Natal).
- Eskom Strategic Plan Eskom (KwaZulu-Natal).
- Umgeni Water Quality Management Plan Department of Water Affairs and Umgeni Water (KwaZulu-Natal).
- KwaZulu-Natal Development Perspective Department of Economic Affairs (KwaZulu-Natal).
- Indlovu Regional Integrated Plan Department of Local Government and Housing (KwaZulu-Natal).
- Umgeni Water and Sanitation Needs Analysis Umgeni Water (KwaZulu-Natal).
- Metro Waste Water Management Plan Durban Waste Water management, City of Durban (KwaZulu-Natal).
- KwaZulu-Natal Electrification Prioritisation Model Eskom (KwaZulu-Natal).
- Umzinyathi Regional Development Plan Umzinyathi Regional Council (KwaZulu-Natal).
- GIS driven model to assess future population growth in quaternary catchments under different growth scenarios Umgeni Water (KwaZulu-Natal).
- Ubombo Master Water Plan Study Mhlathuze Water Board (KwaZulu-Natal).
- Development strategy for local economic development and social reconstruction of the Germiston-Daveyton Activity Corridor – Eastern Gauteng Services Council (Gauteng).
- Structure Plan for the Cities of Beira and Dondo in Mozambique World Bank.
- Land identification study for low cost housing in the Indlovu Region Indlovu Regional Council (KwaZulu-Natal).
- Local Development Plan for Manzini Manzini Town Council (Swaziland).
- Indlovu Project Prioritisation Model Indlovu Regional Council (KwaZulu-Natal).
- Structure Plans for the Cities of Ndola and Luanshya Ministry of Local Government and Housing (Zambia).
- Database development for socio-economic and health indicators arising from Social Impact Assessments conducted for the Lesotho Highlands Development Association – Lesotho.
- Development Plan for the adjacent towns of Kasane and Kazungula Ministry of Local Government, Land and Housing (Botswana).
- Development Plan for the rural village of Hukuntsi Ministry of Local Government, Land and Housing (Botswana).
- Provision of data platform for the spatial analysis of water supply, demand and affordability in Bulawayo – City of Bulawayo and NORAID (Zimbabwe).
- Integrated Development Plans for various District and Local Municipalities including:
 - Nguthu Local Municipality (KwaZulu-Natal)
 - Newcastle Local Municipality (KwaZulu-Natal)
 - Amajuba District Municipality (KwaZulu-Natal)
 - Jozini Local Municipality (KwaZulu-Natal)
 - Umhlabuyalingana Local Municipality (KwaZulu-Natal)
- uMhlathuze Rural Development Initiative uMhlathuze Local Municipality (KwaZulu-Natal).
- Rural roads identification uMhlathuze Local Municipality (KwaZulu-Natal).
- Mapungubwe Tourism Initiative Development Bank (Limpopo Province).
- Northern Cape Tourism Master Plan Department of Economic Affairs and Tourism (Northern Cape Province).



Kerry Lianne Schwartz

- Spatial Development Framework for Gert Sibande District Municipality (Mpumalanga) in conjunction with more detailed spatial development frameworks for the 7 Local Municipalities in the District, namely:
 - Albert Luthuli Local Municipality
 - Msukaligwa Local Municipality
 - Mkhondo Local Municipality
 - Pixley Ka Seme Local Municipality
 - Dipaleseng Local Municipality
 - Govan Mbeki Local Municipality
 - Lekwa Local Municipality
- Land Use Management Plans/Systems (LUMS) for various Local Municipalities including:
 - Nkandla Local Municipality (KwaZulu-Natal)
 - Hlabisa Local Municipality (KwaZulu-Natal)
 - uPhongolo Local Municipality (KwaZulu-Natal)
 - uMshwathi Local Municipality
- Spatial Development Framework for uMhlathuze Local Municipality (KwaZulu-Natal).
- Spatial Development Framework for Greater Clarens Maloti-Drakensberg Transfrontier Park (Free State).
- Land use study for the Johannesburg Inner City Summit and Charter City of Johannesburg (Gauteng).
- Port of Richards Bay Due Diligence Investigation Transnet
- Jozini Sustainable Development Plan Jozini Local Municipality (KwaZulu-Natal)
- Spatial Development Framework for Umhlabuyalingana Local Municipality (KwaZulu-Natal)

BUILT INFRASTRUCTURE

- EIA and EMP for a 9km railway line and water pipeline for manganese mine Kalagadi Manganese (Northern Cape Province).
- EIA and EMP for 5x 440kV Transmission Lines between Thyspunt (proposed nuclear power station site) and several substations in the Port Elizabeth area – Eskom (Eastern Cape Province).
- Initial Scoping for the proposed 750km multi petroleum products pipeline from Durban to Gauteng/Mpumalanga Transnet Pipelines.
- Detailed EIA for multi petroleum products pipeline from Kendall Waltloo, and from Jameson Park to Langlaagte Tanks farms –Transnet Pipelines.
- Environmental Management Plan for copper and cobalt mine (Democratic Republic of Congo).
- EIA and Agricultural Feasibility study for Miwani Sugar Mill (Kenya).
- EIAs for Concentrated Solar and Photovoltaic power plants and associated infrastructure (Northern Cape, Free State, Limpopo and North West Province).
- EIAs for Wind Farms and associated infrastructure (Northern Cape and Western Cape).
- Basic Assessments for 132kV Distribution Lines (Free State, KwaZulu-Natal, Mpumalanga and North West Province).
- Environmental Assessment for the proposed Moloto Development Corridor (Limpopo).
- Environmental Advisory Services for the Gauteng Rapid Rail Extensions Feasibility Project.
- Environmental Screening for the Strategic Logistics and Industrial Corridor Plan for Strategic Infrastructure Project 2, Durban-Free State-Gauteng Development Region.

STATE OF THE ENVIRONMENT REPORTING

2008 State of the Environment Report for City of Johannesburg.



Biodiversity Assessment – City of Johannesburg.

STRATEGIC ENVIRONMENTAL ASSESSMENTS AND ENVIRONMENTAL MANAGEMENT FRAMEWORKS

- SEA for Greater Clarens Maloti-Drakensberg Transfrontier Park (Free State).
- SEA for the Marula Region of the Kruger National Park, SANParks.
- SEA for Thanda Private Game Reserve (KwaZulu-Natal).
- SEA for KwaDukuza Local Municipality (KwaZulu-Natal).
- EMF for proposed Renishaw Estate (KwaZulu-Natal).
- EMF for Mogale City Local Municipality, Mogale City Local Municipality (Gauteng).
- SEA for Molemole Local Municipality, Capricorn District Municipality (Limpopo).
- SEA for Blouberg Local Municipality, Capricorn District Municipality (Limpopo).

WETLAND STUDIES

- Rehabilitation Planning for the Upper Klip River and Klipspruit Catchments, City of Johannesburg (Gauteng).
- Wetland assessments for various Concentrated Solar and Photovoltaic power plants and associated infrastructure (Limpopo, Northern Cape, North West Province and Western Cape).
- Wetland assessments for Wind Farms and associated infrastructure (Northern Cape and Western Cape).
- Wetland assessments for various 132kV Distribution Lines (Free State, KwaZulu-Natal, Mpumalanga and North West Province).

VISUAL IMPACT ASSESSMENTS

- VIA for the redevelopment of the Newmarket Racecourse in Alberton (Gauteng).
- VIA for the Thyspunt Transmission Lines Integration Project (Eatern Cape).
- VIA s for various Solar Power Plants (Northern Cape, Free State, Limpopo and North West Province).
- VIAs for various Wind Farms (Northern Cape and Western Cape).
- VIAs for various 132kV Distribution Lines (Free State, KwaZulu-Natal, Mpumalanga and North West Province).
- VIA for the proposed Rorqual Estate Development near Park Rynie on the South-Coast of KwaZulu-Natal Province.
- VIA for the proposed Assagay Valley Mixed Use Development (KwaZulu-Natal).
- VIA for the proposed Kassier Road North Mixed Use Development (KwaZulu-Natal).
- VIA for the proposed Tinley Manor South Banks Development (KwaZulu-Natal).
- VIA for the proposed Tinley Manor South Banks Beach Enhancement Solution, (KwaZulu-Natal).
- VIAs for the proposed Mlonzi Hotel and Golf Estate Development (Eastern Cape Province).
- VIA for the Eastside Junction Mixed-use development near Delmas (Mpumalanga).
- Visual sensitivity mapping exercise for the proposed Mogale's Gate Lodge Expansion (Gauteng).
- Analysis phase visual assessment for the proposed Renishaw Estate Environmental Management Framework in the Scottburgh Area (KwaZulu-Natal).
- Landscape Character Assessment for Mogale City Environmental Management Framework (Gauteng).



SiVEST Environmental Division

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